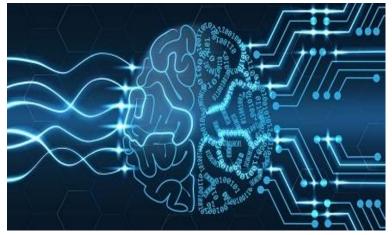# Induction Session for Computer Science Postgraduates
(GradDipComp and MComp, MComp(Adv))

Research School of Computer Science

ANU College of Engineering and Computer Science

16 July 2019

(slides available from http://cs.anu.edu.au/~Peter.Strazdins/seminars)

Welcome all new GDC, MComp and MComp(Adv) Students!

- overview of the GDC, MComp and MComp(Adv) programs

- overview of the Specializations

- support

- computing environment

- resources

- what to do next. . .

Overview of the Graduate Diploma in Computing

- as stated on P&C page, for upskilling of CS or non-CS graduates in minimum time

- suggested enrollment for S2 2019:

  COMP6710 Structured Programming (S2)

  COMP6250 Professional Practice 1 (S2)

  computing electives (12u, S2)

  MATH6005 Discrete Mathematical Models (S1)

  COMP6442 Software Construction (S1)

  computing electives (12u, S1)

- if seeking to follow up with MComp (need GPA ≥ 5), can be granted a year of credit;

  suggest electives include:

  COMP6240 (S2), COMP8260 (S1), COMP6340 (S1)

Overview of the Master of Computing

- as per P&C page: also for both CS and non-CS graduates

  - CS graduates should have obtained exemption/status for MATH6005 and COMP6710 (possibly also COMP6240 and COMP6331)

- latest study plans available here

  - note: COMP6260 Foundations of Computing is now an alternative for MATH6005 Discrete Mathematical models

  - these plans are *NOT* prescriptive! e.g. project over 1 semester can be done in either S1 or S2

  - these study plans spread electives throughout all semesters; alternately could aim to finish more core courses in first year

- an exemption for COMP6250 Professional Practice I may be obtained after passing diagnostic test in Week 1 (must first enrol and register to attend test)

Course Selection Issues in the Master of Computing

- core course choices (which semester, content, technical difficulty):

    - computational foundations: MATH6005 (S1) vs COMP6260 (S2)

    - databases: COMP6240 (S2) vs COMP6420 (S1)

    - networks: COMP6340 (S1) vs COMP6331 (S1)

    - software engineering: COMP6120 (S2) vs COMP8190 (S2, 2020)

- final year projects: COMP8715 (TechLauncher, 2 sems) or COMP8755 (individual, 1 or 2 sem) or COMP8830 (internship, 1 sem, must apply): details

- 5 CS electives: at least 2 must be COMP8000-level!

- (without credit or exemptions) care must be taken to complete a Specialization!

- can upgrade to MComp(Advanced) after 1 year with GPA $\geq$ 6:

    including COMP8260, COMP6442 and 2 'Advanced' courses in 1st-year electives as well; choose COMP6420 & COMP6331

Overview of the Master of Computing (Advanced)

- as per the P&C page, for CS graduates aiming for an industry R&D leadership role or a PhD pathway

- differences from the MComp:

    - no 'introductory' courses in the core (MATH6005, COMP6710, COMP6250)

    - has the more advanced database and networks courses

    - instead of COMP8110 Project Management and a 12u project, COMP6445 Computing Research Methods and 24u COMP8800 Research Project

- latest study plans available here

- a GPA of ≥ 6 must be maintained in the 1st year (otherwise transferred to the MComp)

Postgraduate CS Specializations

- Artificial Intelligence (suggest take COMP6260 in S2 2019 to make room):

  S1 2020: COMP6262 Logic , COMP6320 AI
  S2 2020: COMP8620 Adv. AI, COMP8691 Optimisation or COMP8670 Adv. Logic

- Data Science:

  COMP6490 Document Analysis (S2), COMP8410 Data Mining (S1, 2020),
  COMP8430 Data Wrangling (S2, 2020) + 1 AI/ML course

- Machine Learning: can (possibly) start on COMP6490 and/or COMP6670 Intro. ML
  straight away! (S2)

- Human Centred Design and Software Development

- considerations: interest, industry value, degree of technical difficulty

- note: choosing a Specialization can have an impact of when you take your core
  courses

Support for Postgraduate CS Students

- **CS P/G Convenor**: Peter Strazdins, Peter.Strazdins@cs.anu.edu.au, CSIT N217, x55140

  for *academic advice*: advice on enrolment, program progression and variation

  When seeking a consultation: offer at least at least 3 timeslots that suit you, have your ISIS 'Statement of Results' ready, call to be let in

- **CECS Student Services**: studentadmin.cecs@anu.edu.au, CSIT N202, x54450

  for *administrative advice*: applying for exemption, overload, late enrollment, etc

  Note: for visa-specific matters, you must talk to your visa provider

- **Course Convenors:** for specific help (e.g. on assignments) on each course that you will enrol in, link to respective course web page from Current Postgraduate Students Courses page

CS Computing Environment

- first floor CSIT building has labs with Linux workstations (User Guide)

  Note: CSIT N111 is (mostly) reserved for postgraduate students

- can log in remotely via server `partch`, i.e. `ssh u8914893@partch.anu.edu.au`

  - on a Windows machine, you will need to install a Secure Shell client,

    e.g. by the Cygwin Linux emulation package, from http://www.cygwin.com

- CECS IT Support: helpdesk@cecs.anu.edu.au, CSIT N117 x54321#25

  for all technical support relating to the CS Linux labs

- you also have access to ANU IT services

- once enrolled, you will have an ANU email account
  (`firstname.lastname@anu.edu.au` or `u999999@anu.edu.au`)

  - only use this to contact RSCS/CECS/ANU staff! Quote your uni id!

  - ANU staff will contact you by it: please check it regularly!

Resources for Postgraduate CS Students

- Current Postgraduate Students web page

    - Useful links (Timetabling, Academic Skills & Learning, Counselling)

    - FAQs (Degree Plans and Enrolments, International Students, Resources)

    - Courses (semesters/years(!) offered, course web pages and convenors)

- from the corresponding undergraduate page,

    - CS Student Handbook: assessment issues

    - CS Computing Environment Handbook: guide to the CS Linux labs

- CS 6000+ Piazza Forum https://piazza.com/anu.edu.au/spring2016/cs6000/home

    - Q&A forum, Resources (Course Information, Resources – study plans)

    - you will be automatically added to forum in week 1

    - or can self-enroll via https://piazza.com/anu.edu.au/spring2016/cs6000

What to do Now?

- decide on Specializations and electives (start now!)

    - study course P&C entries and web pages

    - if needed, contact course convenors for further information

- complete your enrollment on-line on ISIS (week 0)

    - any questions, go to the Academic Advisory Sessions (Ian Ross Seminar Room) on 16th & 17th

    - note: you can freely change your enrollment till end of week 2

- find out your lecture/tutorial times on the ANU timetable (week 0)

- register for your tutorials; for each course, either by StReaMs (https://cs.anu.edu.au/streams/) or Wattle (weeks 0–1, the earlier the better!)

- begin attending classes (week 1)

- have a great semester!