Australian
National
University

Structured Programming
COMP1110/COMP1140/COMP6710

Your lecturer
Mechanics/admin
Course goals
Material
Resources
Assessment

Introduction

- Who I am and why are we here?

  - Josh Milthorpe, Research Fellow, Research School of Computer Science
  - Research interests
    - High-performance computing
    - Parallel programming models
    - Fault tolerance

Mechanics

- Web page
  - Schedule, labs, assignment, notices
- Streams
  - Enrolment
- Piazza
- Consultation hours
- Labs
  - You must enroll in a lab group – either physical or online – by the end of week 1

First Year Computer Science
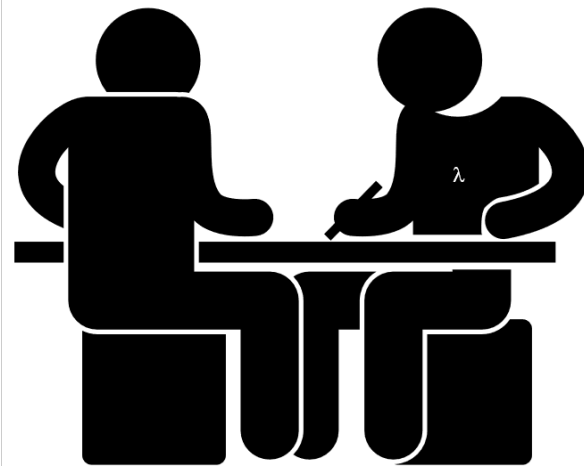
Consultations

1:1 consultations are available for students enrolled in the following courses:
COMP1100, COMP1130, COMP1110/6710, COMP1730/6730
Students are asked to provide their UID to the tutor and to respect a 5min limit during busy times.

Hanna Neumann 1.23
Mon 4-5pm, Tue 4-5pm, Wed 4-5pm, Thu 4-5pm, Fri 4-5pm

Access & Inclusion

Are a team of DisAbility and Equity Advisors who support ANU students whose participation in academic studies is impacted by:

- Disability~ physical or learning
- mental health condition/s
- ongoing chronic medical condition/s, short term illness/ injury

As well as:

- Carers
- Elite Athletes and
- International under 18 year old students.

If your circumstances are listed above and you require support to achieve your academic goals, please visit the Access and Inclusion website to find out about registering.

☎ +61 2 6125 5036
🖥: http://www.anu.edu.au/students/health-wellbeing/diversity-inclusion
✉: access.inclusion@anu.edu.au

A&I Special (Alternative) Exam Arrangements

It is the student's responsibility to ensure that they have a valid Education Access Plan (EAP) in place with A&I at least two (2) weeks prior to examination periods.

The deadline to renew EAPs and request SEAs for 2020 are:
Semester 1:
- Mid-semester exams: 13 March 2020
- End of semester exams: 21 May 2020

Semester 2:
- Mid-semester exams: 14 August 2020
- End of semester exams: 22 October 2020

- Students who do not inform A&I within this timeframe should be aware that failure to so do will result in their SEAs not being implemented for the examination period.

- New registrations after the deadline will be considered on a case-by-case basis

CECS Class Representatives

Roles and Responsibilities

✓ Be creative and proactive in gathering feedback from your classmates about the course.

✓ Act as the official liaison between your classmates and your lecturers in communicating feedback about the course and providing course-related updates to your classmates. You'll also provide regular reports to the Associate Director (Education) on the feedback you've been gathering.

Benefits of Being a Class Rep

✓ The opportunity to develop skills sought by employers – particularly interpersonal, dispute resolution, leadership and communication skills.

✓ Empowerment: Play a more active role in determining the direction of your education. Become more aware of issues influencing your University and current issues in higher education.

Nominations

✓ Please contact CECS Student Services (studentadmin.cecs@anu.edu.au) with your name, Student ID and the course number (e.g. COMP1110) you are interested in becoming a Class Representative for.
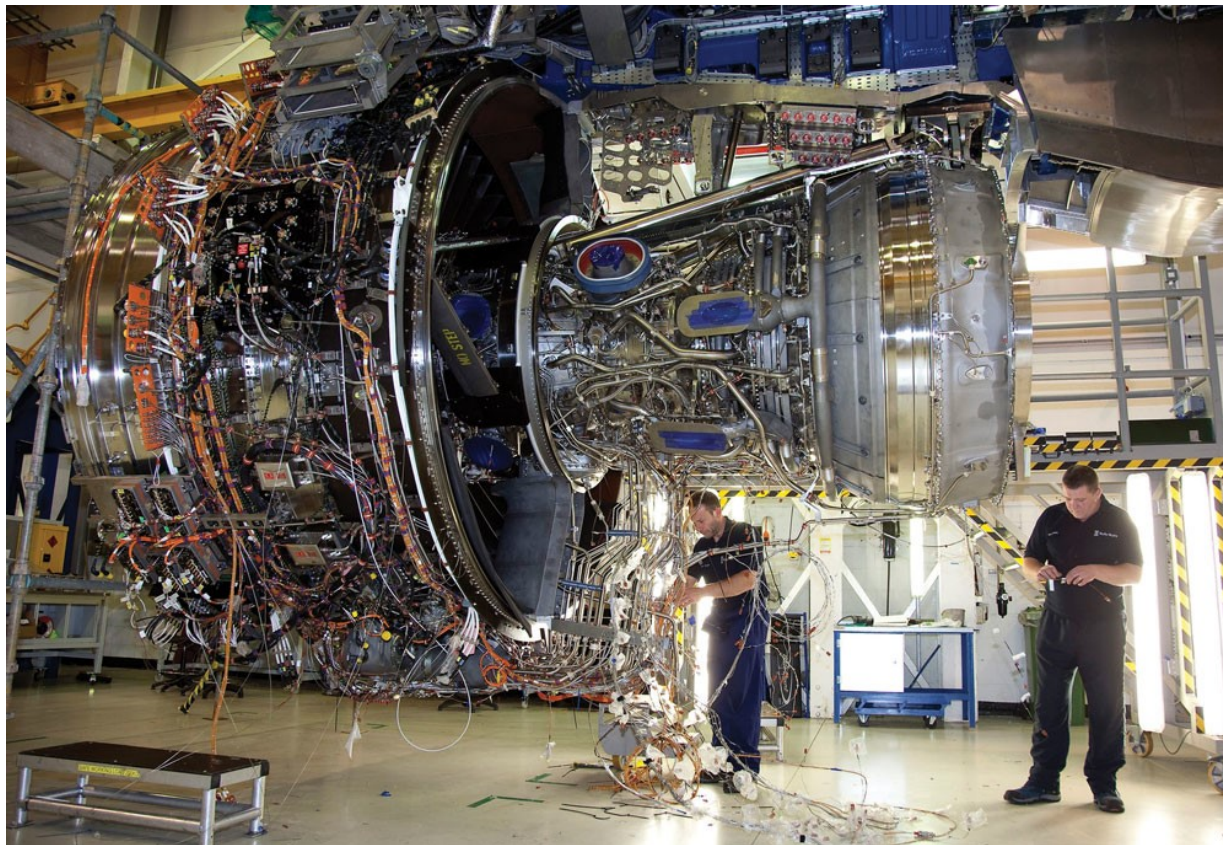
Rolls Royce Trent XWB for the A350.

Photo: AINonline

*"Essentially, engineering is all about cooperation, collaboration, and empathy for both your colleagues and your customers.
If someone told you that engineering was a field where you could get away with not dealing with people or feelings, then I'm very sorry to tell you that you have been lied to. Solitary work is something that only happens at the most junior levels...."*

Yonatan Zunger

Course goals

Introduction to…

- Core Computer Science 🟢
  - Object oriented programming
  - Data structures, algorithms
- Software Engineering 🔴
  - Working with large scale software systems
  - Testing
- Software Development Skills 🔵
  - Modern OO language (Java, including Java FX)
  - IDE (IntelliJ) and SCM (Git)

Material

The material in these lectures is drawn from a number of sources, including:

- The Oracle Java Tutorial (for intro to Java)
- The Oracle JavaFX Tutorial
- Previous years' notes

Teaching modality

Lecture material made available to you *ahead of time* via the course web site.

Classes are used to work through material with working examples.

Classes work best when you engage.

"I've failed over and over and over again in my life

Michael Jordan

Resources

- These slides
  - Available on course website at the start of each week

Resources cont.

- These slides
  - Available on course website at the start of each week
- Online
  - Class web site
  - Class forum (Piazza)
  - Oracle Java SE Tutorial (html, pdf)
  - Oracle JavaFX Tutorials
  - U. Waterloo Java Visualizer (see course web page for link)
  - StackOverflow and other online forums
  - IntelliJ online tutorials

Assessment

5% Lab test

5% Individual assignment

5% Class engagement

30% Group assignment

5% Mid-semester exam

50% Exam

Hurdle Assessments

You must **pass the basic competency assessment**, week 4.

You must receive a mark of at least **40% in the final exam.**

Failure of any of these hurdles will result in automatic failure of the course

Please review the administrative overview (course web page)

Plagiarism

Honesty and integrity are paramount.

They are *not* at odds with research and collaboration.

Do be resourceful, collaborate and engage.

Never represent someone else's work as your own.

Do read the ANU's position on academic integrity
http://academichonesty.anu.edu.au/

"You can know the name of a bird in all the languages of the world, but when you're finished, you'll know absolutely nothing whatever about the bird...
So let's look at the bird and see what it's doing -- that's what counts.
I learned very early the difference between knowing the name of something and knowing something."

Richard Feynman