

The background of the slide is a reproduction of the painting 'The Starry Night' by the Dutch Impressionist painter J.M.W. Turner. The painting depicts a turbulent, swirling night sky filled with bright, glowing stars and a large, luminous crescent moon. The colors are dominated by various shades of blue, from deep indigo to bright cyan, with yellow and white highlights. The brushstrokes are visible and expressive, creating a sense of movement and texture. In the foreground, dark, silhouetted hills and a tall, dark cypress tree are visible against the swirling sky.

Structured Programming

Your Lecturer

Mechanics / Admin

Course Goals

Material

Resources

Assessment

ANU – School of Computing – Structured Programming 1110 / 1140 / 6710




Introduction

- Who I am and why are we here?
 - Paul Scott
 - Research interests
 - Optimisation
 - Decision making under uncertainty
 - Applications to electrical power systems

Mechanics

- Web page
 - Schedule, labs, assignment
- ed Discussion
- MSTeams (online sessions)
- Consultation hours
- Labs
 - Enroll in a lab group by the end of week 1
 - Remote learners in online labs

First Year Computer Science



Consultations

1:1 consultations are available for students enrolled in the following courses:
COMP1100, COMP1110, COMP1140, COMP1600, COMP1730, COMP6710, COMP6730
Students are asked to provide their UID to the tutor and to respect a 5min limit during busy times.

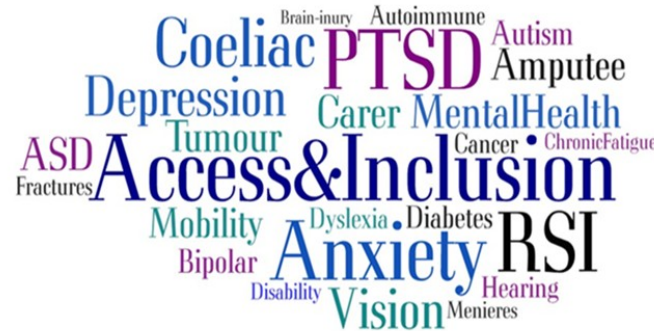
Access & Inclusion

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

CECS Class Representatives

Class Student Representation is an important component of the teaching and learning quality assurance and quality improvement processes within the ANU College of Engineering and Computer Science (CECS).

The role of Student Representatives is to provide ongoing constructive feedback on behalf of the student cohort to Course Conveners and to Associate Directors (Education) for continuous improvements to the course.

Roles and responsibilities:

- Act as the official liaison between your peers and convener.
- Be creative, available and proactive in gathering feedback from your classmates.
- Attend regular meetings, and provide reports on course feedback to your course convener
- Close the feedback loop by reporting back to the class the outcomes of your meetings.

Why become a class representative?

- **Ensure students have a voice** to their course convener, lecturer, tutors, and College.
- **Develop skills sought by employers**, including interpersonal, dispute resolution, leadership and communication skills.
- **Become empowered**. Play an active role in determining the direction of your education.
- **Become more aware of issues influencing your University** and current issues in higher education.
- **Course design and delivery**. Help shape the delivery of your current courses as well as future improvements for following years.

Note: Class representatives will need to be comfortable with their contact details being made available via Wattle to all students in the class.

For more information regarding roles and responsibilities, contact:

ANUSA CECS representatives: sa.cecs@anu.edu.au

Want to be a class representative? Nominate today!

Please nominate yourself to your course convener.

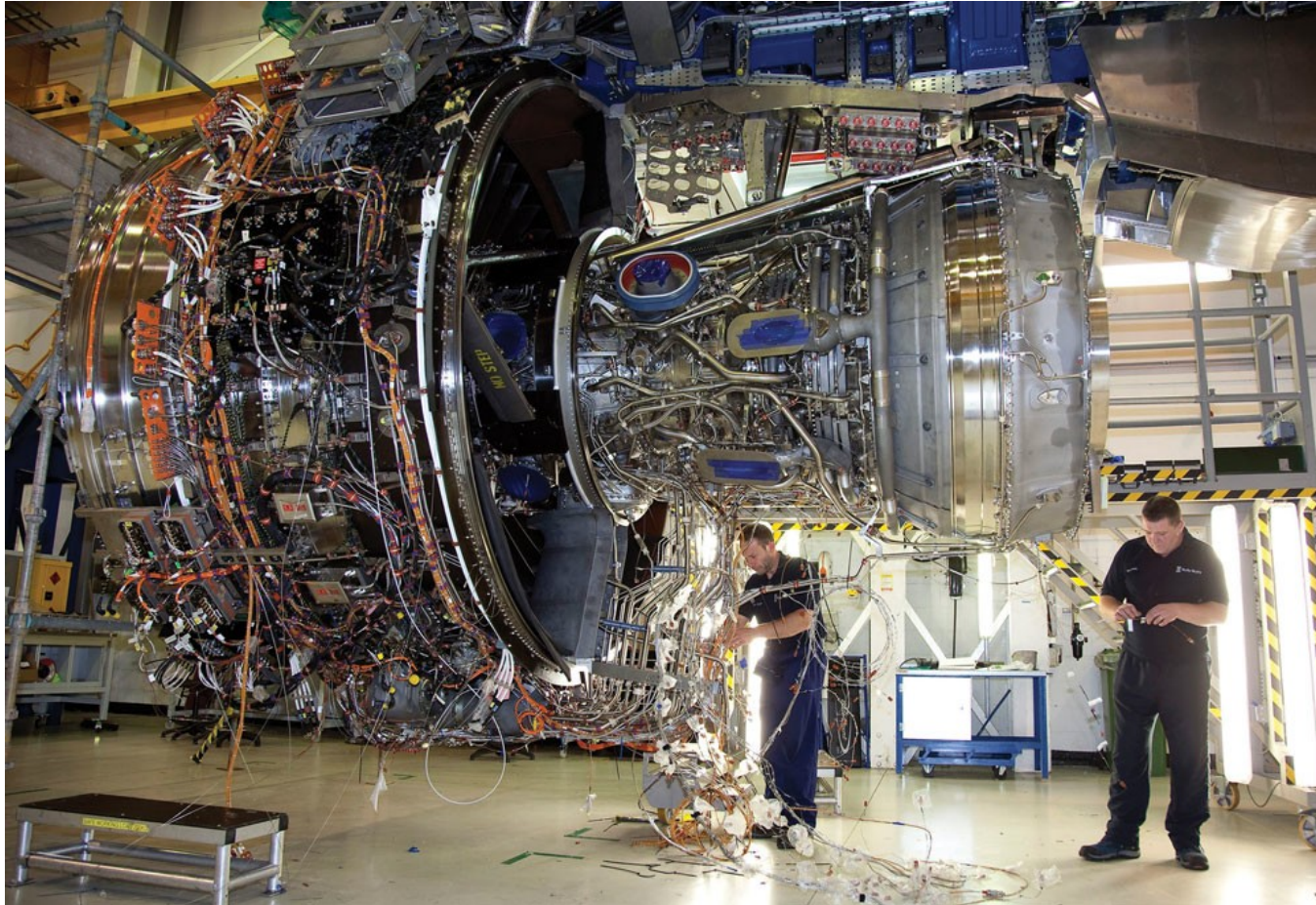
You are free to nominate yourself whether you are currently on-campus or studying remotely.

Class representatives

Expression of interest form at bottom of people page:

<https://comp.anu.edu.au/courses/comp1110/help/>

Close next week.



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
... and that is why I succeed.”*

Michael Jordan

Resources

- These slides
 - Available on course website updated prior to each session
 - Slides from last semester kept as placeholder in case you want to peek ahead

Resources cont.

- Online
 - Class web site
 - Class forum (ed Discussion)
 - Oracle Java SE Tutorial (html, pdf)
 - Oracle JavaFX Tutorials
 - U. Waterloo Java Visualizer
 - StackOverflow and other online forums
 - IntelliJ online tutorials

Assessment

- 5% Lab test
- 5% Individual assignment
- 5% Class engagement
- 30% Group assignment
- 55% Exam

Hurdle Assessments

You must **pass the basic competency assessment**, week 5.
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/>

Code Assistance and AI

Copilot, ChatGPT, Tabnine, Kite, etc...

- Copyright legal ambiguity.
- Unreliable – needs a professional to evaluate output.
- **Learn by trying yourself** is still the best way to become that professional.
- **Exceptions:** explaining code, helping to debug, suggesting alternatives / improvements.
- If used in assignments **must be cited** and clearly explained how used.
- You will only get marks for what we consider your personal contribution.
- **Not allowed** in **labtest**, **basic competency test** or the **final exam**.

*“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