

# ENGG1811 Computing for Engineers - 20T3



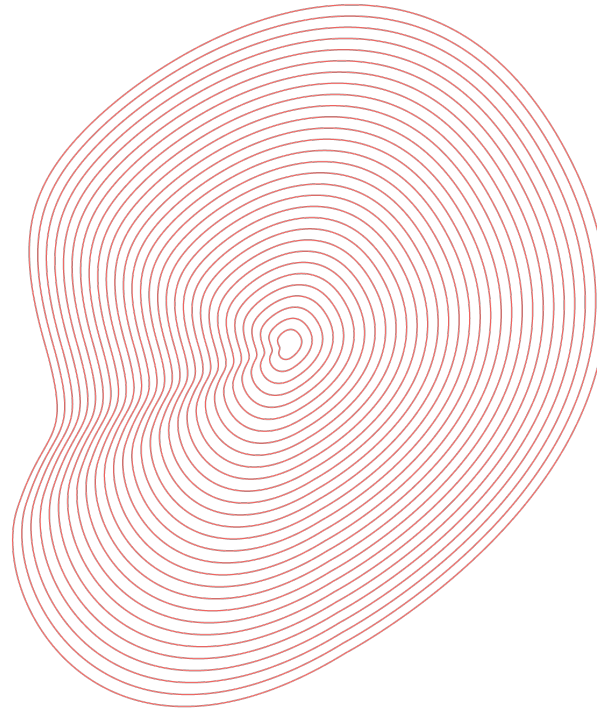
**Professor Aaron Quigley**

**Head of School (Computer Science & Engineering)**

# Welcome!

## Summary

- Staff
- Course Objectives
- Ways of Learning
- Lecture Schedule
- Assessment
- Avoiding Plagiarism
- Software



### Course Website:

<https://webcms3.cse.unsw.edu.au/ENGG1811/20T3/>

# How to find the lecture recordings?

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Aaron Quigley Lecturer in Charge

Resources / Course Outline

## Course Outline Public

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Start here

<https://webcms3.cse.unsw.edu.au/ENGG1811/20T3/>

### Course Details

Course Code	ENGG1811
Course Title	Computing for Engineers
Convenor	Professor Aaron Quigley
Lecturer	Professor Aaron Quigley
Admin	Mei Cheng Whale
Classes	Timetable for all classes
Consultations	To be announced in Timetable for all classes
Units of Credit	6
Course Website	<a href="https://webcms3.cse.unsw.edu.au/ENGG1811/20T3/">https://webcms3.cse.unsw.edu.au/ENGG1811/20T3/</a>
Moodle	<a href="https://moodle.telt.unsw.edu.au/course/view.php?id=53585">https://moodle.telt.unsw.edu.au/course/view.php?id=53585</a> (online and recorded lectures)
Handbook Entry	<a href="http://www.handbook.unsw.edu.au/undergraduate/courses/current/ENGG1811.html">http://www.handbook.unsw.edu.au/undergraduate/courses/current/ENGG1811.html</a>

Step 1  
click here

# How to find the lecture recordings?

ENG1811 - Computing for Engineers - 2020 T3

Dashboard > My courses > ENGG1811-5209\_00264

**UNSW Engineering Information**

▶ Important Health Information

*Your health and the health of those in your*

⇒ This Moodle page gives you access to your online classes.  
Your course website is located at <http://www.cse.unsw.edu.au/~en1811>

▶ Remote Class Rooms (Blackboard Collaborate)

Step 2  
click here

# How to find the lecture recordings?

Step 3  
click here

Blackboard Collaborate

Aaron Quigley

Sessions

Recordings

Recordings

Session name / Recording name	Date	Dur
Lecture Friday 09:00-11:00 / week_1_fri_sept_18_9am_to_11am	9/18/20, 10:59 AM	01:5
Lab Thu12 Tutors: Enoch, Ricky, Alicia / recording_1	9/17/20, 1:20 PM	00:0
Lab Wed17 Tutors: Kevin, Xiyue, Tom / recording_1	9/16/20, 5:34 PM	00:2
Lab Wed15 Tutors: Adam, Danyon, Kevin / Week 1 Wed15 Lab	9/16/20, 3:49 PM	00:4
Lab Wed13 Tutors: Adam, Danyon, Bilal / Week 1 Wed13 Lab	9/16/20, 1:53 PM	00:4
Lecture Wednesday 09:00-11:00 / week_1_wed_sept_16_9am_to_11am	9/16/20, 11:02 AM	02:0

Step 4  
click here

# People and Website

Staff Name	Role	Email (Best method)	Phone (ext)
Aaron Quigley	Convenor and Lecturer	<a href="mailto:a.quigley@unsw.edu.au">a.quigley@unsw.edu.au</a>	
Mei Cheng Whale	Course Administrator	meicheng@cse.unsw.edu.au	9385-5683 Ext 55683
	Lab tutors		

- For general administrative questions, email [en1811@cse.unsw.edu.au](mailto:en1811@cse.unsw.edu.au)
- For info see the **class home page** <https://webcms3.cse.unsw.edu.au/ENGG1811/20T3/>

Also: recall that the StuReps represent CSE students to the relevant staff, anonymising any grievances, questions, or feedback. <https://www.cse.unsw.edu.au/~stureps/>

Aaron



University of St Andrews

# Course Objectives

- What you *should be able to do* by the end of the semester:
  - **use the Python programming language** and its associated packages to solve computational problems
  - **design and implement solutions to computational problems**
  - Have a basic understanding of numerical computing environments such as MATLAB® and Microsoft Excel
- **Important:** There are two versions (called Python 3 and Python 2) of the Python programming language. They are slightly different but for compatibility with course materials, lab exercises, assignment marking and exam, **always use Python 3.7, not Python 2.**



# Ways of Learning (1)

- Lectures

- Lecture slides available before the class
- Code:
  - Before the class: sample code or incomplete examples
  - After the class: Complete examples
- Ask questions if you wish

- Labs

- To develop experience with problem solving
- Supported by tutors
- Scope: programming exercises + one online multiple choice question
- Expectations:
  - Complete the work by the end of the lab.
  - Must be ready to show 30 minutes before end
  - Tutors may ask you questions

## Ways of Learning (2)

- Assignments
  - Extended programming work that integrates skills from multiple weeks' of lectures
- Online Consultation
- Course Forum
  - strongly encouraged to participate
  - usual etiquette:
    - respect for participants' opinions
    - no assignment solutions (tiny fragment is OK to ask a question though)

# Assessment

## Assessment

Please note that the following schedule is subject to change.

Item	Topics	Due	Marks	Notes
Labs	All topics	8 labs during Weeks 1 to 10 during your lab classes. In addition, two self-directed labs due in Week 8 and Monday Week 11.	20%	<ul style="list-style-type: none"><li>• 8 labs (weeks 2, 3, 4, 5, 7, 8, 9, 10). Each lab is marked out of 3 marks: one mark for an on-line multiple choice question, and two marks for satisfactorily demonstrating your lab work during the respective lab. (16% for 8 labs).</li><li>• Each self-directed lab (aka "virtual lab") is marked out of 2 marks. There are two virtual labs. (4% for two self-directed lab)</li></ul>
Assignment 1		Week 7	20%	
Assignment 2		Week 10	20%	
Final Exam	All topics	Exam period	40%	

# Laboratory classes

- 8 labs (weeks 2, 3, 4, 5, 7, 8, 9, 10; 16% for 8 labs).
  - answer **one multiple** choice question during your lab time (1 mark) ,  
and
  - **satisfactorily demonstrating** your lab work during the respective lab or early next lab (2 marks) .
- There are **two self-directed labs**. Each self-directed lab is marked out of 2 marks. (4% for two self-directed labs)
- The self-directed labs are sometimes called “virtual labs”. If you find the term “virtual lab” used please let the lecturer know so it can be updated.

# Assignments

Two Assignments.

- Assignment-01 : available in week 03, and due in week 07.
- Assignment-02 : available in week 07, and due in week 10.

# Calculations of final mark

You receive the sum of the component marks as follows:

**Final mark** = Labs (20) + Assignment-1 (20) + Assignment-2 (20) + Final exam (40).

You need to get 50 or more marks to pass the course.

# Lecture Schedule

Please also refer to the proposed “**Course Schedule**” in the course outline below:

<https://webcms3.cse.unsw.edu.au/ENGG1811/20T3/outline#schedule>

The proposed lecture schedule is:

Week	Topic
Weeks 1 to 9	Problem solving and programming using the Python 3 programming language
Two Self-Directed Lectures	Matlab and Spreadsheet
Week 10	Introduction to Machine Learning. Course Revision.

# Avoiding Plagiarism

- Academic honesty
  - everything submitted for assessment must be your own work
  - acknowledge all sources unless obvious
- Assignments 1 and 2
  - program code must be developed alone
  - discussion about solutions OK, indeed encouraged
  - imperfect but honest attempt will still attract fair marks
  - exam-related question carries more weight than the assignment, and will only be solvable if attempted the assignment
- Anti-plagiarism measures
  - start early and get help if you're struggling
  - we usually run sophisticated similarity analysis software
  - mark reduction of *up to 100%* applies to non-original submissions
- More information in Student Conduct section in the course outline



# Software

Software package	When	Note
Spyder (Part of Anaconda for Python 3.7)	Lecture Weeks 1-10, Assignments	Free software
Matlab	Self-Directed Lecture / Lab	Available to UNSW students under licensing agreement
Microsoft Excel	Self-Directed Lecture / Lab	

- All software are available on the CSE lab computers
  - Remote access to lab computers is available
- Getting started section of the course website has written and video instructions on installing Anaconda

# Checklist

To start this course off on the right foot, make sure you have done all of the following by the end of week 1.

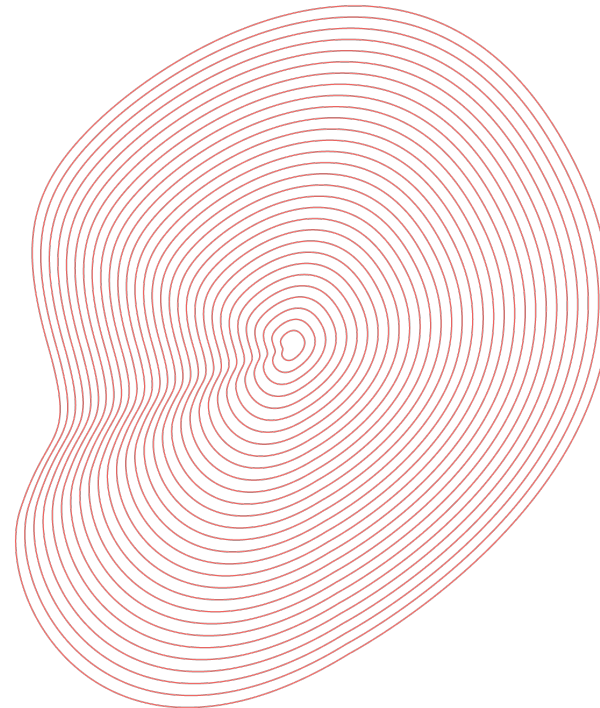
- Enrolled** in the course properly (with a lab class)
- Found out **where the labs are**
- Installed Anaconda for Python 3.7 on your own computer
- Had a go at the **first lab** (lab 01)
- Dropped into the course forum, maybe posted a comment

**Class home page (yet again):**

<https://webcms3.cse.unsw.edu.au/ENGG1811/20T3/>

# Welcome!

–End



– **Course Website:**

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