



# DataSoc



# First Year Guide

## EDITED BY

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DATASOC 2020 DIRECTORS  
*with love*



## Enterprise Design Thinking

A framework for empathising with the current problem faced by end-users through to a solution creation process that is focused on delivering user outcomes





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# President's Address

## Welcome to UNSW!

On behalf of the UNSW Data Science Society, I would like to extend a warm welcome to all the new students joining us in 2020. However you may have found yourself studying Data Science – whether it be hearing that it is the ‘Sexiest job of the 21st century’, an interest in analytics and visualisations, an unwavering curiosity as to what Data Science even is, there is something for you here!

Starting at UNSW as a first year student can seem like a nerve-wracking experience - or at least it was for me! It didn't seem like too long ago when I attended my first ever Microeconomics lecture, learnt that class started at 5 past and not on the hour, and awkwardly asked for directions to the Red Centre.

One piece of advice is to embrace the challenges and opportunities that come your way and to take responsibility for the overwhelming level of freedom that you now possess. You are the champion of your own adventure, and I encourage you to step out of your comfort zone and try something new.



**"I HAVE THE  
SEXIEST JOB OF  
THE 21ST CENTURY"**

*- ELLEN, PROBABLY*

Attend that networking night even if you don't know the right questions to ask professionals. Go to that workshop despite not knowing if you have the right skills for it. Participate in that trivia night event and meet someone new.

University is an exciting, riveting and life-altering chapter of your journey, so don't hesitate to get your hands dirty with all that it has to offer.

Good luck, enjoy the ride and don't forget to smile through it all ☺

**Ellen Wang  
President of DataSoc, 2020**

# Data Science?

# DataSoc?

In a nutshell, Data Science is a multidisciplinary field that combines aspects of computer science, mathematics (namely statistics) and business decisions. It is a new field brought on by the need to harness the power and knowledge gained from accumulating data.

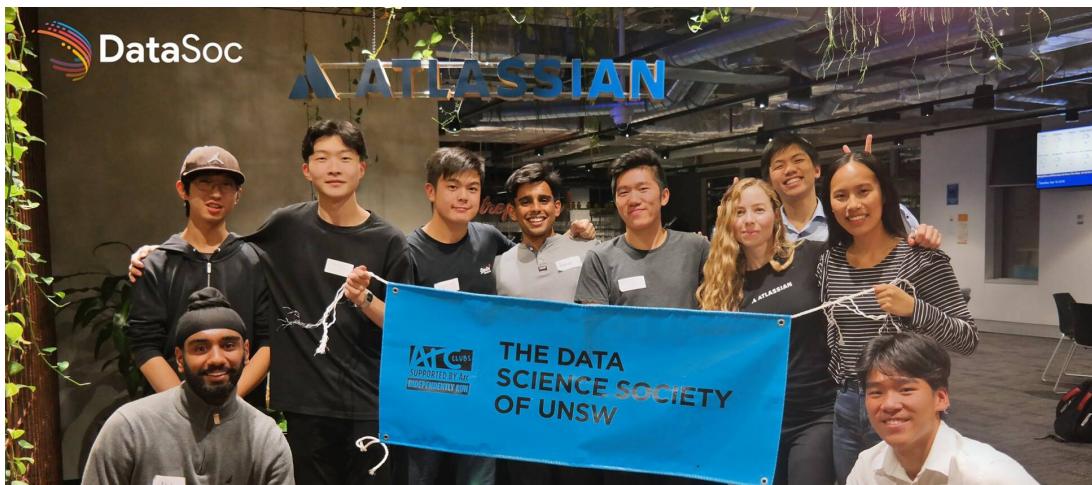
In other words, data is everywhere! and businesses, governments and organisations need skilled professionals who know how to gather the right data, gain insights, make business decisions and, build powerful systems and AI applications.

The Data Science and Decisions degree is new, exciting and highly in demand. Over the course of your studies you will learn the fundamentals of each field data science is built upon and then specialise in either quantitative, business or computational data science.

DataSoc is not just an UNSW society but the largest constituent Data Science Society in Australia. We bring together a community of data science professionals and enthusiasts who are driven to discover how data shapes the world around us. We aim to offer an open community platform to connect, educate and empower students with the skills and knowledge to unlock the power of data science.

This year, we are looking to host even more social events for you to meet cool people, along with comprehensive educational workshops for you to gain valuable data science skills. We will also be holding competitions and career events for you to showcase your acquired skills in front of industry representatives.

**Bernardo Croll**  
IT/Publications Director



# Welcome to UNSW!

So you've finally made it - whether this was your first choice, your last choice, or your dream choice, you're here at UNSW **by choice!** You might be feeling overwhelmed with things to do and opportunities to experience, so here are a few handy tricks that would've made life so much easier early on:

## Email:

Bookmark Outlook and log in on your phone - it's the main form of formal communication!

Make sure you organise your email a little bit and separate the unimportant stuff from the important stuff. It's a slippery slope to missing a deadline because all the society newsletters covered it up!

## A Useful App:

Look, we all get lost on campus. Yes, even that 5th year veteran! *Lost On Campus* has one of the better UIs and has the locations of classrooms, microwaves, computer labs, and even toilets (this has literally saved me countless times!).

## Room Bookings

Sometimes you just need somewhere to do a group assignment without being bothered. There are two ways to book rooms:

1. The library system
2. Via Outlook calendar.

*Handy tip: If you pass a room and it hasn't been booked for a class (check the timetable on the door), you can use it! Just make sure you leave when someone has booked the room.*



## Getting to and from Uni

You should already know to avoid peak hour as much as you can - but did you know lower campus buses are more frequent than upper campus?

The 898 (which stops at both gates) comes less frequently than the 893 (which stops only at the lower campus gate) - so it can be more worth it for you to walk from upper campus to the lower campus bus stop.

*Details:*  
<https://www.futurestudents.unsw.edu.au/getting-unsw>

## Arc

Don't forget to register for Arc! It's free, and the little sticker grants you a bunch of great services: wellness events, free snacks and drinks, discounted society fees, and even retail and food/drink discounts!

*Details:*  
<https://www.arc.unsw.edu.au/join/member-benefits>

Good luck, and see you around!

**Victor Tsang**  
**IT/Publications Director**

# ACADEMICS

## HOW DOES STUDY WORK IN UNI?!

### Resources/Support

Your first year of uni may seem daunting, but remember, there are multitudes of resources out there to help you.

**Tutorials:** These are designed for you to ask questions and clarify anything you don't understand. Doing your homework (even some of it) allows you to test whether you understand the concepts taught during lectures. The homework questions are also often model questions (sometimes just numbers are changed) for midsem and final exams. When you run into trouble, do not worry, as this is typical and means you should ask questions in your tute!

**Office Hours:** Most professors dedicate at least an hour each week for students to visit their offices and ask questions. This is a good time for any questions you may have not asked your tutor or anything you want to clarify with the lecturer. It's always good to obtain information and answers straight from the source, as the lecturer-in-charge knows what parts of their courses are important to your learning (and likely examined).

**PASS classes:** Peer Assisted Study Sessions are also available, and generally involve previous students re-teaching and answering questions related to your courses. Take advantage of these if you are falling behind - they tend to teach concepts again in different ways and are essentially free time for you to ask questions.

### Study Tips

Tips, tricks and methods for efficient studying tend to vary significantly depending on the person. If you like to be organised, a weekly schedule is often very helpful to allocating your time throughout the week! It is best to decide early on that certain times are for studying (e.g. night before a tutorial to do your homework or assignment), or even just what tasks need to be done by a certain day of the week.

One of the most difficult things you'll experience in uni is trying to catch up after falling behind - this is generally not fun, and often the marks you get for the stress are simply not worth it. However, if you do find yourself to be someone who does things at the last minute, please just budget the right amount of time so that you can guarantee you finish adequately in the last minute, and not just abandon the task altogether.

Remember, first year is the easiest way to keep a high WAM by your final year - the marks are so much easier to get for the effort you put in as subjects only get harder as you progress.

Furthermore, if you are interested in exchange, the choice of university depends highly on your grades, so it's best to start off well!

**Ivan Hou**  
**Education Director**



# ACADEMICS

## HOW DOES STUDY WORK IN UNI?!

### Navigating the DSD Degree

There are many different interpretations of what data science is. Nonetheless, most data science jobs can be classified as either statistics and modeling, machine learning and artificial intelligence or data interpretation and business forecasting. For this reason, UNSW has decided to ensure that data science students get a general education in maths, coding and economics (core requirements), and also specialise in one of three possible majors: Quantitative (statistics), Computational or Business.

The data science degree has 12 core courses (72 units of credit - UOC). Each major has a further 8 courses (48 UOC - units of credit) which are not included as part of the core courses, and 3-4 courses (18-24 UOC) which are also core courses. For example, the Quantitative major requires students to take Bayesian Inference, which is not a part of the core data science degree (one of the 8 unique courses). However, it also requires students to take Maths 1A and Maths 1B, which every student must take as a part of the core data science requirements (two of the 3-4 core courses).

Overall, a data science student must take 24 courses (144 UOC), regardless of what major they choose. This means that they take 12 core courses, a further 8 courses for their chosen major, 2 general education courses and 2 free electives. General education courses cannot be from the science, business or engineering faculties, and free electives can be from any faculty.

**Harry Partridge**  
**Education Director**



*Data science students  
get a general  
education in maths,  
coding and economics.*

# EXTRA CURRICULARS

## A Guide to First-Year Energy

To a seasoned eye, a first-year can be spotted from a mile away. That aura of nervous excitement! That carefully constructed outfit! That surreptitious look at Lost on Campus to figure out where the hell QUADG025 is, or Timeweave to check which class your best friend is in right now.

That isn't a bad thing though - on the contrary, first-year energy will help you have the best (or most interesting) year of your life, and this isn't just because of how new and challenging your academic life will be. It's because of the extra-curriculars available to you! Uni is truly made for you to explore every pathway you've ever wanted to, whether that be a new sport, a new hobby or an activity you wouldn't have given a second glance at in high school.

For me personally, that activity was student society. I had never thought I would join a society when I first stepped into UNSW. In fact, the only reason why I joined DataSoc was because I do the degree.



I remember having the most awkward, stilted conversation with the 2019 Exec team at the O-Week stall, because I literally only wanted to sign up because of my degree, nothing else.

I wasn't planning on applying for any subcommittee position, and yet look at where I am today. It truly goes to show that whatever expectations you have for your first year at university, you should throw them right out the window.

I can't explain this 'first year energy' as anything else but the vibe that someone gives off. A comparable example would be the way that you're probably able to tell who a Year 7 student is from a single glance.

I think that first-year energy will serve you well through what will definitely be a tumultuous year in your life. It'll make sure that you stay on your toes, that you watch out for yourself (and your mates) and that you'll make the most of whatever you're doing. Your choices are truly limitless, and while older students may roll their eyes and turn up their noses at some of the activities that university has to offer, first-year energy will prevent you from doing the same!

So my final (and really only) piece of advice - **take full advantage of your first year!** Once this first year is over, you'll never be able to experience university through the mindset which you have right now. Go ahead and apply for all those subcommittee roles, go ahead and go to all those events, go ahead and sign up for something which you have even the vaguest of interests in. You got this!

**Kelly Tao**  
Secretary/Communications Officer

# CAREERS

## NOW THAT I'VE STARTED... HOW DO I LEAVE?

A big welcome to DataSoc 2020 from Careers + Sponsorships. Throughout this year we'll be providing you loads of events with external companies and even more opportunities to build yourself professionally. But before we get to all that, here are a few things that you can do yourself to build a strong foundation to get the most out of these events and your degree.

### 1. Write your Resume

Your resume is a short, all purpose pitch to get employers interested. Here are the things you should include:

- Short description[Relevant]
- Professional Summary
- Education
- Extra curricular

### 2. Create a LinkedIn Profile

LinkedIn is THE social network used by the professional world. So take advantage of it and use it to enhance your career

- Showcase your experiences and achievements
- Build connections with individuals in the industry (actually, try shooting your shot with the big dogs, you'll be surprised with how open they are to respond)
- Scout for jobs
- Develop your knowledge with the online courses offered on LinkedIn Learning (it's FREE for UNSW Students!)

With those pieces in place, career events turn into a series of opportunities to build your business acumen.

But remember, your portfolio also consists of your technical skills, so take the time to bolster them.

- Select courses that are interesting and important
- Utilise the slew of online resources (like LinkedIn Learning)
- Test your knowledge against other students in Hackathons and Case Cracks

For more detailed information, be sure to read the section our Education Directors have written, and be sure to attend their events!



Soon you'll be interested in applying for work and we'll be there to help you out. We'll be sure to keep you guys posted on new and interesting job prospects, so make sure to like us on Facebook and read the bi-weekly newsletter.

With all that being said, enjoy your first year at uni, we're keen to see you at all our events!

**Roshan Abraham and Tony Lu  
Careers Directors**

# MEET THE TEAM

## EXECS



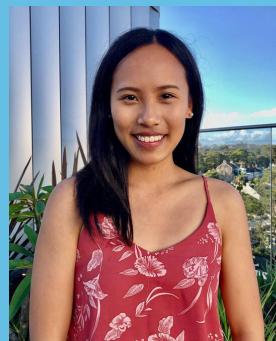
ELLEN WANG

*PRESIDENT*



NIGEL LIN

*VP (INTERNAL)*



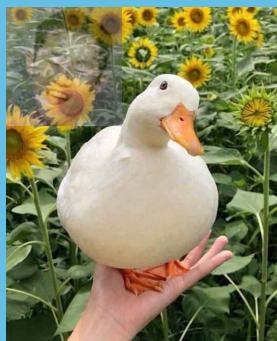
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SHIRLEY XU

*ARC DELEGATE*



ABHIJOT SINGH

*DIVERSITY  
AMBASSADOR*

**FIRST YEAR GUIDE**

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**UNSW DATASOC**

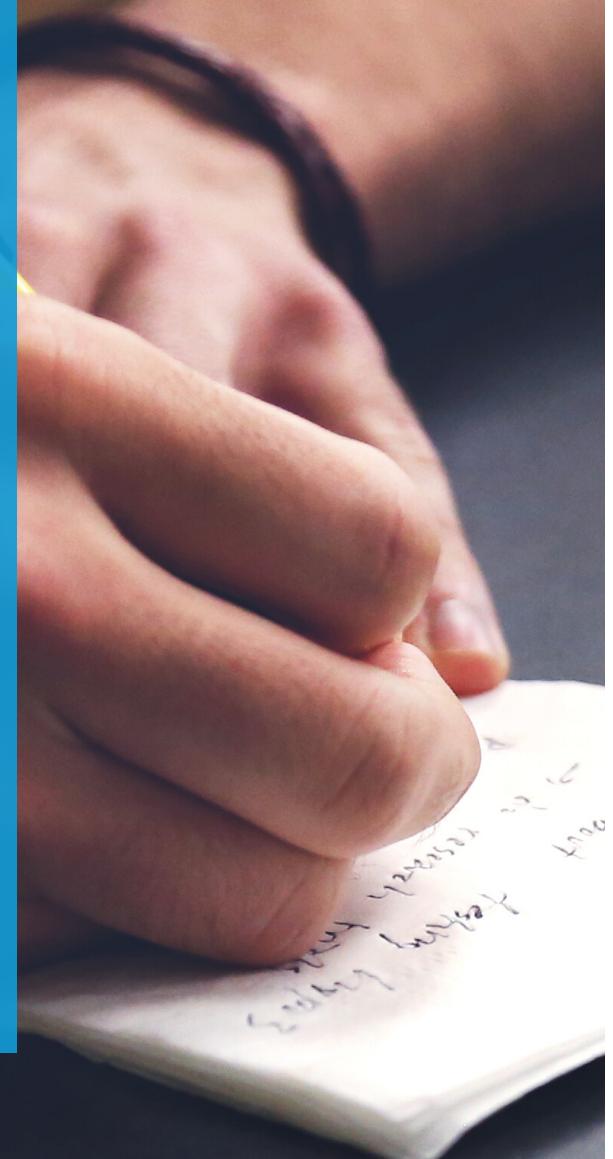
# Got any Questions?

DON'T BE SHY! E-MAIL US AT  
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