# **ACADEMIC DAY STUDENT SHARING AY25/26** COMPUTER SCIENCE



### How you can make the most\* of your time here

\*This is for you to decide!

### **ABOUT ME**

### Kimaya Wanjari (tele: @kimaya\_w)

- Year 2 Computer Science + NUS College
- NOC Toronto AY 25/26
- Deputy Director of Orientation AY 24/25
- NUS College Club AY25/26
- NUS Varsity Choir and NUSC Barbershop
- ex-Avenger for CS1101S
- Currently SWE summer intern









### **Types of headach**



Good news: it's a breeze if you plan ahe

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# **COURSE** PLANNING

### • Know the **requirements** for your

- Course completion
- 2nd major and minors / double major (if any)
- Specialisations
- BComp Dissertation Project (required for Honours (Highest Distinction))
- You must finalise your academic plan declaration by start of Year 3!
- Take as many foundational (core) courses while you can. You never want to be left behind due to missing prerequisites.
- GEs / IS1108 / ES2660 / Science --> relatively lighter workload. You can take them after year 2 to pair with demanding courses! or use them as buffer in cases where you don't get a course.

Downside of the above is that you only have 3 courses for SUs (12 units) after Y1

	Curr	ent Students	s MySoC News Events /
Home About - Education - Community - Research - Entrepre	eneurship ~ Industry ~ Giving		
Home » Programmes » Undergraduate » Computer Science » Curriculum (Prospe	ctive Students)		
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			Resources for Current Students Curriculum (Prospective Students)
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Computer Science + Overview + Degree Requirements + Computer Science Focus Areas for BComp (CS)		> >	Students         Curriculum (Prospective Students)         Turing Programme         Concurrent Degrees         Programmes         Double Degree         Programmes

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### Double counting courses

**A** Triple counting is **not** allowed

Some courses are only offered in 1 sem per AY

<b>CS Focus Areas</b>	Image: Series of the series of th
<ul> <li><u>Algorithms &amp; Theory</u></li> </ul>	Each focus area requires 3 primaries
<u>Artificial Intelligence</u>	courses to complete but you can do more
<ul> <li><u>Computer Graphics and Games</u></li> </ul>	If you plan your time at SoC well, you can
<u>Computer Security</u>	do multiple CS focus areas! :)
• <u>Database Systems</u>	
<ul> <li><u>Multimedia Information Retrieval</u></li> </ul>	Note: Some of these courses are only offered in 1 semester per AY!
<ul> <li>Networking and Distributed Systems</li> </ul>	onereu in risemester per Ar:
• <u>Parallel Computing</u>	
Programming Languages	
• <u>Software Engineering</u>	

Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Academic Plan Declaration (for all students) Starts 0900hrs, 14-Jul-25 Ends 1700hrs, 18-Aug-25	15-Jul-25	16-Jul-25	17-Jul-25	18-Jul-25	19-Jul-25	20-Jul-25
21-Jul-25 SELECT COURSES (Rd 1) (UG and CPE) Starts 0900hrs	22-Jul-25 SELECT COURSES (Rd 1) (UG and CPE) Ends 1200hrs	23-Jul-25	24-Jul-25 0900hrs: Release outcome for SELECT COURSES (Round 1) (Note: Students will be informed via email and uNivUS)	25-Jul-25	26-Jul-25	27-Jul-25
28-Jul-25	29-Jul-25 SELECT COURSES (Rd 2) (UG and CPE) Starts 0900hrs	30-Jul-25 SELECT COURSES (Rd 2) (UG and CPE) Ends 1200hrs	31-Jul-25	01-Aug-25 0900hrs: Release outcome for SELECT COURSES (Round 2) (Note: Students will be informed via email and uNivUS)	02-Aug-25 FLAG DAY	03-Aug-25
04-Aug-25 SELECT COURSES (Rd 3) (UG and CPE) Starts 0900hrs	05-Aug-25 SELECT COURSES (Rd 3) (UG and CPE) Ends 1200hrs		07-Aug-25 0900hrs: Release outcome for SELECT Courses (Round 3) (Note: Students will be informed via email and uNivUS) Online Appeal - Unable to Secure Course Start 0900hrs End 1700hrs, 21-Aug-25	08-Aug-25 RAG DAY	09-Aug-25 NATIONAL DAY	10-Aug-25
11-Aug-25 Lectures Start	12-Aug-25 SELECT TUTORIALS/LABS (Rd 1) (All careers) Starts 0900hrs Ends 1700hrs	13-Aug-25	14-Aug-25 0900hrs: Release outcome for SELECT TUTORIALS/LABS (Round 1) (Note: Students will be informed via email) SELECT TUTORIALS/LABS (Rd 2) (All careers) Starts 0900hrs Ends 1700hrs	15-Aug-25	16-Aug-25	17-Aug-25
18-Aug-25 Tutorials for GE% (non-GER and non-GEQ) & Writing Course Start 0900hrs: Release outcome for SELECT TUTORIALS/LABS (Round 2) (Note: Students will be informed via email)	19-Aug-25	20-Aug-25	21-Aug-25	22-Aug-25	23-Aug-25	24-Aug-25
(All careers) Starts 0900hrs Ends 1700hrs (Note: Allocation process will be temporarily unavailable from 0830 to 1100hrs.)						

#### Course registration calendar 📰

### **COURSE** REGISTRATION

- Don't forget your rounds!! (speaking from experience unfortunately)
- For tutorial bidding use the alternate

ranking "hack"

Since it's quite likely to get your 1st, 2nd and 3rd choice but less so for the 4th and 5th, your 6th and 7th choices should be the second preferring timing for your modules 4 and 5, to increase your chances.

### YOUR RANKING SHOULD

1.1A6.5B11.1C16.5D2.2A7.4B12.2C17.4D3.3A8.3B13.3C18.3D4.4A9.2B14.4C19.2D5.5A10.1B15.5C20.1D

MODULES ARE NUMBERED 1 - 5



TUTORIAL SLOTS FOR EACH MODULE ARE LABELLED A - D, BY DESCENDING ORDER OF PREFERENCE

# TSOUR

# IT'S DONE.

After sem 1 ends





#### makeameme.org

### But what about **SUMMER???**

Options to explore things you enjoy :)

Orbital

Hackathons + Networking events

Special Programmes

Internships

### CP2106 ORBITAL

### Application

• Apply in pairs (preferably from SoC) during Y1 summer

### Experience

- Very good way to learn about SWE principles (OOP, SOLID and QA/test
- Monthly peer reviews
- You'll be assigned an advisor (mandatory) and a mentor if Artemis-leve
- Advisors inform you about deadlines and give feedback, some are chill,
- Expected 140–160 hours over the summer (tracked via self-reporting).

### Tips

- Choose a project you're interested in because motivation really matter
- Communicate with your partner often. Misalignment is a common rease fail.

	c coss Orbital () v
ting)	Self-Driven Programming Summer Experience For Freshmen
el.	
others strict	
ſS.	
on teams	

# MY ORBITAL EXPERIENCE **VEASNA**

- Clinic Management system for Project Battambang
- Efficient record keeping and cross station in the absence of reliable network
- We have successors to this project this year and new positions open every cycle

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Age : Sex : Phone No. : Prescription Metformin 500 Take one tablet	35: Vannak Chney	Phone No. : 123-456-7890         Height and Weight         Height 1: 180 cm         Weight 2: 74 kg         BMI 2: 22.84 kg/m2         Healthy Weight         Image: No pinhole 1:         Reports black dot	Right (OD) Left (OS) 20/20 20/20 20/20 20/20 : in vision	Name       Dsg (mg)       Units       Dosage Instructions         Name       Dsg (mg)       Units       Dosage Instructions         hours and Take one tablet every       6 hours and Take one tablet every       6 hours and Take one tablet every         Aspirin       81mg       10 tablets       Take one tablet daily	8 10 36
Drug Allergies Erythromycin		Dental Deferred Head Lice Head Lice Report	tes -	Loratadine 10 10 Take one tablet a day in the morning.	





# STARTING PROJECTS HACKATHONS

- Level up programming skill (\*debatable because of AI) and improve **product thinking**
- Learn new tech/tools outside the classroom
- Practice teamwork, time management, and problem-

solving under pressure.

• There is a chance you will continue to develop the idea

into a full-fledged product even after the hackathon



### MID HACKATHON

### GUY TRYING TO SOLO EVERYTHING



### MEMBER PLANNING ON LEAVING





▲ Clinic flow and records management system



SURF OR PAY

The ultimate productivity tool

Log in



SET YOUR GOALS



DISCIPLINE YOUR FRIENDS



STAY ON TRACK TOGETHER

▲ Productivity tool with real financial penalties



Posture management tool





\*credits to Lim Ji Yong and Meera Ranjan for working on the hardware !!

### SPECIAL PROGRAMMES

- Undergraduate Research Opportunities Programme (UROP)
- Student Exchange Programme (SEP)
- NUS Overseas Colleges (NOC)
- Overseas Community Involvement Project (OCIP)
- And many others...

#### Know the mapping for each of these special programmes!!

NOC	Units	Grading	CoC Manning
		Grauing	SoC Mapping
TR3201N <u>or</u> ETP3203L	9	CS/CU	CS3882 + 1 UE
ETP3206L	16	CS/CU	IER (12 mc) + { CS3203 (8 mc) + 1 UE <u>or</u>
TR3203 <mark>N/E/P</mark> <u>or</u> ETP3202 <b>L/E/P</b>	8	Letter	2 3KUE + 1 UE <u>or</u> 3 UE }
TR3002	4	Letter (OCT)	
TR3049A <u>or</u> ETP3222A	4	Letter (OCT)	
ETP2271	2	CS/CU	
Total units	43		

Eg.1year NOC ^

# NUS OVERSEAS COLLEGES



Beijing



Chicago-Urbana-Champaign



Chongqing



Indonesia



Japan



London



Munich





New York



Norway



Paris





Shanghai



Stockholm



Thailand



The Greater Bay Area



The Philippines

Toronto-Waterloo

Santiago





Vietnam



Malaysia



Singapore



Silicon Valley

### Every location has its own unique selling point/ industry

Know which locations have partner universities

Factor in the duration of your programme (3 mth vs 6 mth vs 12 mth) into your study plan early on

I highly recommend doing a 3mth NOC before going for longer NOC programmes in your following years

### INTERNSHIPS

### Where to Apply

- <u>Main platforms</u>: LinkedIn, Google Careers, company websites
- <u>TalentConnect</u> = helps to land opportunities for credit-bearing roles (ATAP)

How Many Applications?	When to Intern?
• Expect to mass send applications before getting an offer	• Summer (May–A
<ul> <li>It's a numbers game. Don't take rejections personally</li> </ul>	<ul> <li>Winter (Dec–Jar</li> </ul>
	<ul> <li>Part-time during</li> </ul>
Can Y1s Get Internships?	• Consider ATAP (
<ul> <li>Rare, but possible especially if you have:</li> </ul>	
Polytechnic background (big plus!)	Quick Tips
<ul> <li>Side projects / GitHub / small contract work</li> </ul>	Start LeetCode e
<ul> <li>Most students do orbital during the summer after Y1</li> </ul>	<ul> <li>Focus on project</li> </ul>

-Aug) = most common (12 weeks)

an) = rare, usually < 1 month

ng semester = risky but possible (depends on load)

(6 months, takes LOA)

e early (even Easy Qs help)

cts + learning early; offers will follow

### TECHNICAL INTERVIEW PREPERATION (SUMMER) – **TIPS**

What is it?	AY23/24 Su
<ul> <li>10-week non-graded summer prep programme for coding interviews</li> </ul>	May 20, 2024 -
	Past Submissions
<ul> <li>Focused on helping freshmen prepare for technical internships</li> </ul>	Question
<ul> <li>No modular credits, open to all SoC students</li> </ul>	Coin Change II LeetCode
	House Robber II LeetCode
What You'll Learn	Combination Sum LeetCode
<ul> <li>Weekly DSA homework (based on the famous Tech Interview Prep</li> </ul>	Coin Change LeetCode
List)	Alien Dictionary LeetCode
<ul> <li>Language-agnostic (Python, Java, C++, JS all fine)</li> </ul>	Showing 1 to 5 of 50 rows
<ul> <li>Based on Tech Interview Handbook</li> </ul>	Past Interviews
	Partner
Timeline & Format	Timenikhil Timenikhil
<ul> <li>Weekly online lectures (recordings available)</li> </ul>	tingxuanp
Start Date around mid-May	Kan Jun Hong Fluffykan
	Kan Jun Hong Fluffykan
	Lo Yong Zhe Reallyeasy1
	Showing 1 to 5 of 5 rows

Immer Completed View Jul 21, 2024 Q Search Submitted At (SGT) Difficulty Language Action Jul 14, 2024 Medium Java View Jul 14, 2024 View Medium Java Jul 14, 2024 View Medium Java Jul 14, 2024 Medium View Java Jul 14, 2024 Hard Java View Previous Next Q Search Completed At (SGT) Duration Language Action Jul 14, 2024 43m 41s Python 3 View Jun 23, 2024 1h 34m 16s Python 3 View Jun 14, 2024 1h 4m 9s Java View Jun 14, 2024 48m 0s Java View Jun 8, 2024 5h 11m 35s Python 3 View Previous Next

### But what if I want to do more than just study during sem time?

Student Clubs

Student Life Events

Part-time Teaching Assistant

## **STUDENT CLUBS**

### **Explore broadly in Year 1**

- Attend welcome teas & intro sessions
- Join multiple Telegram/Discord groups
- Try out workshops, don't commit blindly

### What's your vibe?

- Want to **build/create**?  $\rightarrow$  DSC, Hackers, FinTech, GDG, StartIT, WiT
- Want to **compete**?  $\rightarrow$  GreyHats, Hackers
- Want to **lead**?  $\rightarrow$  NUSSU Students' Computing Club, ExCos

### Don't overcommit

• Quality > quantity: pick 1–2 you can really be active in

### Full list of Official SoC Student Clubs

- NUS Students Computing Club
- Developer Student Clubs (DSC)
- NUS FinTech Society
- Women in Tech (WiT)
- NUS Games Development Group
- NUS GreyHats
- NUS Hackers
- StartIT

# BEING A STUDENT TEACHING ASSISTANT (TA)

- Fulfiling experience + keeps the content fresh in your brain even after completing the course
- E.g. CS1101S has a large team of avengers. Keep a lookout for applications if you are interested after Y1S1!
- Being a TA in the Y1 courses probably helps your chance of being one for future courses
- Some courses ask former TAs to recommend students from their class to be future TAs
  - E.g. CS3230
- SoC compensates students generously
- TA workload can vary greatly across courses
- You **don't need** an A+ or even an A/A- for that matter to be a TA
  - Ability to take exams != Ability to teach/explain

### Make time for what **won't show up on your academic transcript** :)











### Mental Health resources at NUS

Mental health is more important than we might realise 💔 Especially in uni



#### **NUS Care Unit**

The NUS Care Unit (NCU) comprises a team of trained professionals who provide emotional and practical support to all NUS students and staff regardless of faculty, department or hostel - who have been affected by sexual misconduct.

#### Phone

+65 6601 4000

Email ncu\_help@nus.edu.sg



#### **University Counselling Services**

Counselling is free for all full-time NUS students at the University Counselling Services (UCS). Counsellors at UCS abide by a strict confidentiality policy, allowing you a safe space to share openly.

You may walk-in (available only at Kent Ridge Campus), phone or email for an appointment with UCS.

#### Phone

+65 6516 2376

Email ucs@nus.edu.sg



#### **Hotlines for Psychological Emergencies**

#### **Campus Security**

**4**+65 6874 1616 (Kent Ridge Campus) **4**+65 6516 3636 (Bukit Timah Campus)

Available 24/7 for immediate assistance during life-threatening psychological emergencies

#### Office of Safety Health & Environment

+65 6516 4341 (Emergency preparedness, fire safety & business continuity) +65 6516 1084 (Laboratory, office & general workplace safety)

Lifeline NUS **L** +65 6516 7777 (24 hours)

# **OTHER THINGS** TO MENTION

### Free Printing (COM1)

- Computing students are given 50 pages of printing quota monthly.
- Each student can hold up to 100 pages of free printing quota

### Study spots + booking them in advance!

- Bookable
  - U Town Education Resource Centre
  - Central Library
  - Med-Science Library
- Unbookable
  - COM1 basement
  - Terrace



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# ALL THE BEST!

Telegram: @kimaya\_w if you have any questions!