Your Seniors

Bryan  
IS Year 4

Sean  
BZA & Exons Year 4

Sherman  
IS Year 4
Agenda

Bryan

- Entering university and my experience

Sean

- Possibilities in Uni

Sherman

- How to maximise time in Uni
Sharing By:

Bryan
IS Year 4
My Uncertainties as a Freshman

- How do I navigate the vast field of IT?
- Will I find a family in university?
My Best Decision: Joining the Computer Science Department
My Worst Decision: Overloading my F
Sharing By:

Sean
BZA&Econs Year 4
Possible University Plans

**Year 1**
- Spend time clearing foundation modules to form a strong base
- Start trying out new things / CCAs that you have not tried before (e.g. dance) - continue those that you like!

**Year 1 Summer**
- Intern, Orbital, NOC SEA, Summer School, CCAs (e.g. spend time helping out for orientation programmes), taking a break, work on side projects

**Year 2**
- Start of think about your strengths and weaknesses; future career plans and how you want to get there - **SoC career services** is helpful for this
- Apply for exchange - do clear 2Ks so that you can map the modules you want / NOC (Will need 2 referrals)
- Take part in case competitions / hackathons - can do in Y1 also
- Teaching Assistant - good to retain knowledge + improve communication
- Prepare for Internship Applications (CV, Resume, Programming, etc)

**Year 2 Summer**
- Internship, ATAP/IIP (Clears Internship Requirements), side projects, CCAs, Summer School

- I spent Y1 working on Hall, SoC and NUS level CCAs.
- Did not Intern in Summer - went for OCIP, organised Orientation; No regrets!

- Y2S1 - Part Time Data Analytics Internship @ Shopee; Case Comp
- Y2S2 - Part Time Data Science Internship @ Shopee
- Summer - Data Analytics Internship @ Grab

Disclaimer - this is just what I have observed; please do not be pressured to follow it. Uni is different as you decide your own path!
Possible University Plans (Cont)

Year 3
- People typically go for exchange / NOC / ATAP & IIP here
- Clear Programme Electives, especially those that you prioritise
- In Y3S2 - apply for dissertation (FYP)

Year 3 Summer
- I would strongly recommend interning here as most companies will be looking to convert their summer interns to full time roles!
- Side Projects / Preparation for full time job applications

Year 4
- Do FYP (If you are taking FYP over ATAP/IIP)
- Apply for jobs (if you were unable to get a conversion)
- People take it chill as well

Graduation

Disclaimer: This is just what I have observed; please do not be pressured to follow it. Uni is different as you decide your own path!

- Y3S1 Exchange @ SMU (Supposed to go for exchange in Y3S2😭😭)
- Winter + Y3S2: Data Analytics / Engineering Internship @ SEA
- Summer: Summer Analyst @ BlackRock
Sharing By:

Sherman
IS Year 4
Making the Most of the Time

21st Computing Club Management Committee - Academic Liaison Director
Making the Most of the Time

22nd Computing Club Management Committee - President
Day-to-Day Tips

● For each semester, have an Excel/Sheets to track the deadlines you have each week
  ○ Super useful!!! I only did this from YS1 :(  

● Prepare a study plan after YS1
  ○ Super useful so that you know which terms certain modules are available
  ○ Ensures you can meet graduation requirements
  ○ Have multiple versions in case!
  ○ Balance your workload - you will know your strengths and weaknesses after the first semester

● Help is available - do reach out if you need it
  ○ Approach friends, seniors, professors, undergraduate office, etc!

● Pace yourself
  ○ Easy to burn out as you may want to try as many things as possible
  ○ Comparison may be natural as I understand that many of you come from academically strong backgrounds
  ○ However, try your best to focus on improving yourself & understand that there is no one ‘best’ way to spend your University Years
Uni hacks

1. Get a 2nd monitor
2. NUS emails are super important: a lot of opportunities
3. SOC events: Workshops
4. Form a good network of friends for classes
5. Planning your timetable well (webcasts)
6. Make use of summer/winter holidays well
7. Discuss with Prof/TAs/friends in every class
8. Find Prof/Senior as mentors
9. Get to know seniors
Activities in School

- Clubs in Computing
  - Computing Club, NUS Hackers, Games Development Group, GreyHats, BIZIT, Fintech Society

- Clubs/interest groups in NUS
  - >100 groups across academic, non-academic, performing arts, faith & language, diversity, sports

- Overseas opportunities
  - NOC, SEP, Summer, Winter (Grade-free mods, get a good name on your resume)

- Orbital
  - 4MCs to do your own project over summer
Activities Outside

- Internships - pick companies and job functions strategically, use it to explore before committing to real work
- Hackathons, case-competitions, pitches
- Special Term
- Self-initiated Projects
- Build your resume/CV
- Part-time internship during semester
- Join Computing activities
We’re here for you

Bryan
@bryanjude

Sherman
@ShermanD

Sean
@seansljh

BZA 21/22 Cohort Chat
https://t.me/bza2021

IS 21/22 Chorort Chat
https://t.me/infosys21

NUS Students’ Computing Club
A Constituent Club of the NUS Students’ Union

connect@nuscomputing.com

instagram.com/nuscomputingclub

fb.com/nuscomputing

nuscomputing.com
Appendix
What is IS about?

Information Systems

Computer Science  Business
IS vs CS

IS
- Application-based
- High-level

CS
- Theoretical
- Low-level
IS vs CS

IS

- Financial Technology
- IT Solutioning
- IT Business Innovation and Entrepreneurship
- IT Security and Legal Aspects
- Digital Business

CS

- Algorithms & Theory
- Artificial Intelligence
- Computer Graphics and Games
- Computer Security
- Database Systems
- Multimedia Information Retrieval

Networking and Distributed Systems
- Parallel Computing
- Programming Languages
- Software Engineering
Using UEs wisely on Major/Minor/Stra

- We have **32 MCs**, potential to take another Major/minor “for free”
  
  2nd Major requires **40 MCs** (reduced from 48 previously), 16 MCs can be double counted
  
  Minor requires **20 MCs** (reduced from 24 previously), 8 can be double counted

- For self-interest and enjoyment
- Sell yourself better
- Focus on certain industries
- vs. double degree (2nd year still can take)
- Can drop majors/minors whenever
BZA & IS: Feedback on Y1 mods

MA1521/MA1102R Calculus

Comments:

MA1521: You can study at the end and still do well, prof can explain concepts well, slow placed, question curve is tough

MA1102R: Very diff from math we are used to, a lot of proving, impossible questions, finals very hard

How to survive this mod:

MA1521: There's cheatsheet, a lot of calculation, math that you are used to

MA1102R: Assignments and midterms must do well, its manageable

Disclaimer: MA1102R has been replaced
IS: Feedback on Y1 mods

CS1010J Programming Methodology (Java)

Real comments:

Enjoyable mod. Good entry to programming even if you have 0 prior experience.

How to survive this mod:

Practice is key to doing well. Even though you are only required to do a number of exercises, do as many as you can. Be ready to consult others. Learn to design your program structure before starting.
IS: Feedback on Y1 mods

CS1231 Discrete Structures

Real comments:

A challenging mod that you must understand your concepts before going into the exam. Math is applied in computing.

How to survive this mod:

Practice early and often. Some questions are difficult to identify which solution to apply. Past exam questions can help a bit.
BA & IS: Feedback on Y1 mods

GER1000 Quantitative Reasoning

Real comments:

Group mates are everything. Very easy, people leave early for finals. More useful than vs what people say about it.

How to survive this mod:

MCQ finals, be careful. Can just read the notes, videos are long and slow. MUST discuss the tutor. The grading is highly dependent on them.
BZA: Experience with Y1 Modules

CS1010S Programming Methodology (Python)

- Can be stressful, most-talked-about mod, feels like 8mc mod, many submissions
- To survive: discuss (not copy!) with friends and seniors, practice papers and try to do it yourself, do not fall behind, 100% effort before mid term

BT1101 Introduction to Business Analytics (R)

- Weekly submissions, good primer to machine learning, statistics and data visualisation
- To survive: discuss (not copy!) submissions with friends, reach out to TAs for consultations if you need, start early as much as possible, have a good cheat sheet!

Note: BT1101 is a core module for IS Students as well!
BZA: Experience with Y1 Modules

MA1101R Linear Algebra

- Totally different way of math, proving, a lot of symbols, notations, concepts, hard to visualize, important concepts for ML & AI in future
- To survive: USE CLEARLY TO CALCULATE (don’t attempt to manual), ask if have cheat-sheet - if yes, don’t need to memorize, use textbook (this helped me!), be consistent

MA1521 Calculus for Computing

- Relatively lighter workload, especially for those that took ‘A’ Level Math
- To survive: be careful - bell curve can be steep
BZA: Experience with Y1 Modules

IS1103 IS Innovations in Society
- Will discuss IT innovations & its impact on society, ethics, privacy, etc
- To survive: try your best to participate in class - it forms a significant portion of your grade!

CS2030 Programming Methodology II (Java)
- Labs; programming exams; finals; can be tough as most of us learn Java from a Python background
- Personally found this really challenging - Java requires a strong understanding of object orientated programming (very useful)
- To survive: Read up beyond the syllabus, watch youtube videos, discuss with friends, practice!!!
BZA: Experience with Y1 Modules

CS2040 Data Structure & Algorithms

- Labs; Extremely useful for interviews; knowing the differences between the data structures will go a long way
- Do the labs yourself, discuss with friends, clarify with your TAs whenever in doubt, try to write pseudo-code, watch youtube videos, read geeksforgeeks, visualalgo

BT2102 Database Management & Visualisation (SQL, NoSQL, V)

- Learn this well as SQL is highly used in the industry for database querying and management (if you are interested in data related jobs)
- To survive: similar to other BT CS modules
Useful resources

www.nusmods.com (if you’re not already aware)

Edurec (Admin portal)
https://myedurec.nus.edu.sg/psp/CS90prd/?cmd=login&languageCd=ENGLISH

LumiNUS (mods portal)
https://luminus.nus.edu.sg/

Massive library of info
https://github.com/nushackers/notes-to-cs-freshmen-from-the-future

Physical resources
- Find e-versions of certain textbooks online, carousell, seniors in hall/RCs

Debugging tool for CS1010S
www.python tutor.com

Financial Support & Scholarships
http://www.nus.edu.sg/osa/financial-aid

Programming Help
- Google seriously has all the answers just search concisely/ Stack Overflow

>100 Clubs and Interest Groups

Job / Intern Search
https://nus-csm.symplicity.com/
https://www.internsg.com/
https://www.linkedin.com/
https://www.glassdoor.com/index.htm
https://glints.com.sg

MOOCs / Online Courses
Coursera, Datacamp, RBX ULibity, Lynda

Podcasts
Data Science / Statistics / Computer Science Podcasts on Spotify

Daily inspiration
Quora Digest, Medium Daily Digest, LinkedIn

Box (legendary)
https://app.box.com/folder/1078698877