

Non-Graduating Non-Exchange (NGNE) Programme for Undergraduates





NUS





Century-Old Institution

Founded in **1905**, the National University of Singapore (NUS) is the oldest higher education institution in Singapore.



Top Research University

NUS is consistently ranked as one of the top 20 universities in the world and is **ranked 1st** in the Asia-Pacific region by QS World University Rankings 2022.



A Cultural Melting Pot

As the **8th most international** university* in the world, NUS has a total of 17 faculties and schools, 11 overseas colleges, 30 university-level research institutes and centres, with more than 40,000 students from **over 100 countries**.

*Cited from Times Higher Education The World's Most International Universities 2022

A photograph of the NUS School of Computing building, featuring a large glass facade reflecting the sky and trees. The text "NUS School of Computing" is visible on the glass. The building is surrounded by greenery and trees.

SCHOOL OF COMPUTING



Department of **Computer Science**
Department of **Information Systems & Analytics**



214 Academic & Teaching Staff
185 Research Staff
120 Admin & Technical Staff



4,731 Undergraduates
1,240 Graduate students
828 Masters students, **412** PhD students

INTERNATIONAL RECOGNITION

TOP ASIAN UNIVERSITY IN COMPUTING

1st

IN

ASIA

6th

IN

THE WORLD

According to QS World University Rankings 2022 by subject:
Computer Science and Information Systems





01 PROGRAMME INTRODUCTION





WHAT IS NGNE?

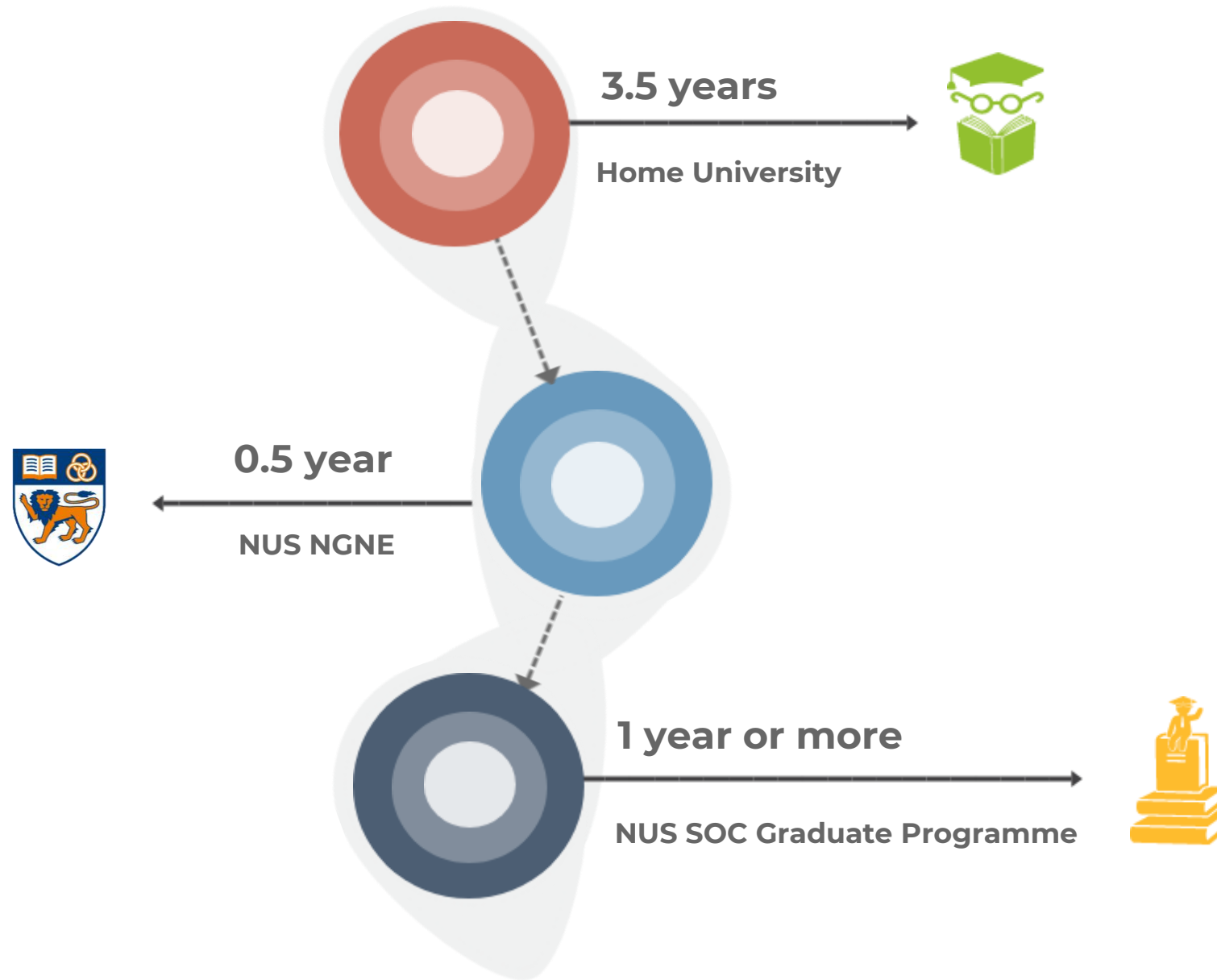
The Non-Graduating Non-Exchange Programme (NGNE) is a programme designed for final year students to get a taste of a different education system by immersing themselves in one of the world leading universities.

In general, students will spend one semester in NUS attending classes and working on a research project under the supervision of a School of Computing (SOC) academic staff, while experiencing the life of a typical SOC undergraduate with the opportunity to enjoy special computing and education resources offered by SOC.

NGNE is a favourable platform if you wish to apply to the SOC Graduate Programme, as students who meet the stated requirements in this programme may be considered for early admission into the Master of Computing (MComp) programme. Students who perform exceptionally well will also stand a chance to be offered the SOC PhD programme.



3.5 + 0.5 + 1 STRUCTURE



BENEFITS

Unit Transfer to MComp

In the Master of Computing (MComp) programme, students are allowed to take up to two level-4000 courses to fulfill unit requirements.

Unused course units from level-4000 courses taken in the NGNE programme can be used to fulfill the MComp unit requirement.

Unit

Graduate Admission

Students who meet the stated requirements in the NGNE programme may be considered for early admission to MComp.

Students who perform exceptionally well will also stand a chance to be offered the PhD programme.



Graduate Dissertation

Students who have worked on the Independent Project (CP3106) in NGNE also have the advantage to research further on the previously established topic as their Graduate Programme dissertation.



MASTER OF COMPUTING (MCOMP) ADMISSION REQUIREMENT

NGNE students who met all the requirements below may be considered for early admission to the Master of Computing (MComp) Programme:

1

All study courses
with grade
B+ or above

2

CP3106
Independent Project
with grade
A- or above

NOTE:
An interview may be
conducted before a
decision to offer is
made.

COMPLETION REQUIREMENTS

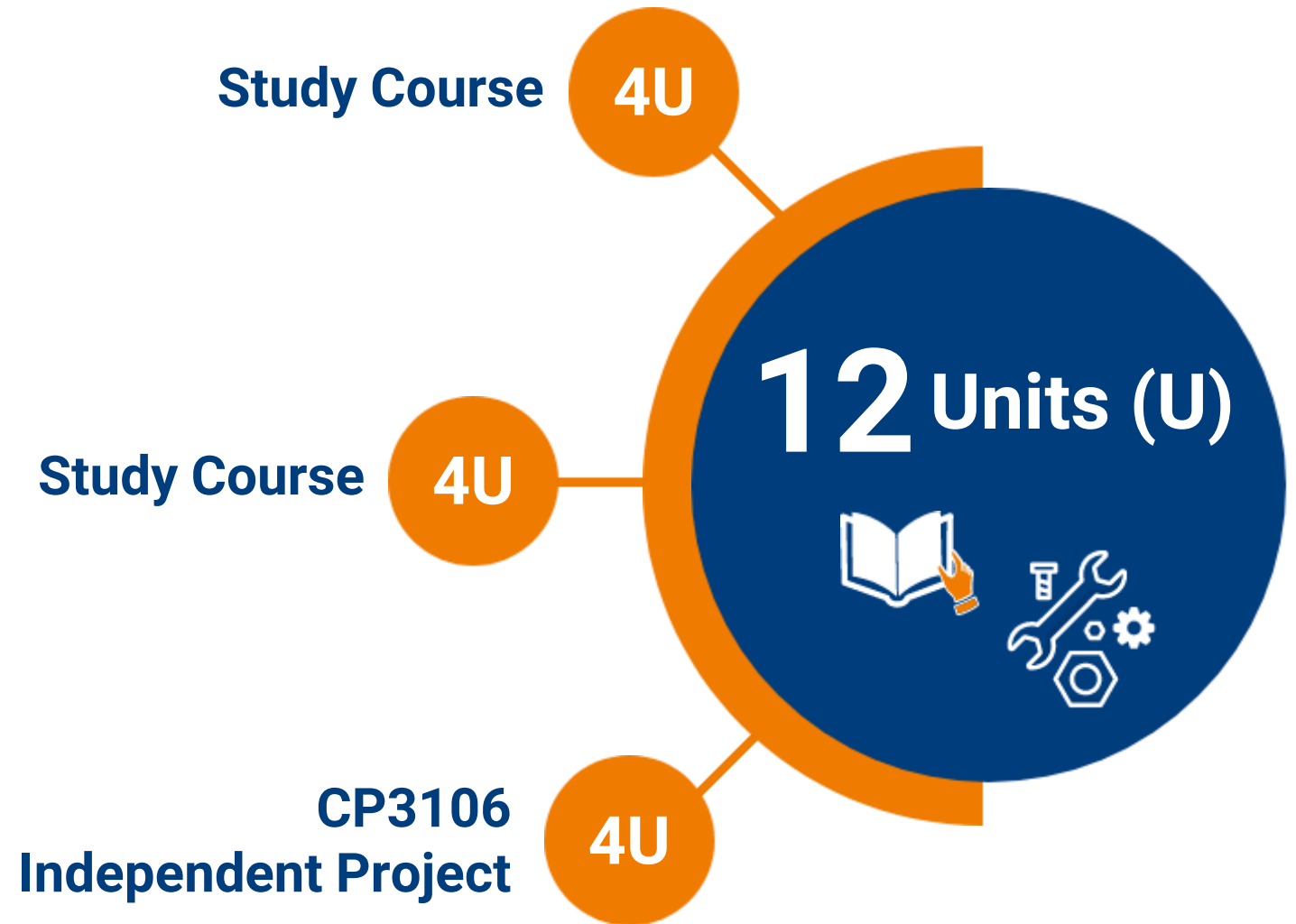
During the instructional period, enrolled students will complete 2 courses (4 units each) in addition to CP3106 Independent Project (4 units) within the semester.

- **Study courses:**

- Complete 2 courses, with at least one of them being a level-4000 course.
- Students are strongly encouraged to choose courses of level-3000 and above.

- **Research Project:**

- Each student will be working under the guidance of a NUS SOC professor to complete CP3106 Independent Project.



TIME & VENUE



AY2023/2024
Semester 1



August 2023 to
December 2023



NUS
School of Computing

TIMELINE

Time	Activity
13 Mar – 26 Mar 2023	Submit application for Pre-Approval.
By 10 April 2023	After obtaining Pre-Approval, submit official application via NUS online application portal.
Mid May	Work with NGNE coordinator to confirm advisor & courses to take. Work with advisor on project details and submit proposal form for research project.
Mid Jun	Receive official offer from NUS Registrar's Office. Apply for on-campus accommodation / source for off-campus accommodation.
Jul	Receive In-Principle Approval (IPA, used as entrance VISA and for application of Student's Pass) for entry to Singapore. Purchase air ticket.
Before 7 Aug 2023	Arrive in Singapore for registration.
7 Aug – 17 Nov 2023	Semester 1 instructional period (13 weeks + 2 recess/reading week). Each week, students should spend around 4 days on the project, 2 days on the courses, meet the advisor (either online or face-to-face) for at least an hour or more. Students are to submit a draft report to both their advisor and another appointed evaluator by 17 November 2023, 5pm . On 24 November 2023 , there will be an evaluation session by the advisor and the appointed evaluator.
25 Nov – 9 Dec 2023	Course examination & project/report evaluation.
10 Dec – 14 Jan 2024	Vacation. Return to home country. NUS SOC PhD programme application deadline falls on 15 December 2023 .
28 February 2024	NUS SOC Master of Computing (MComp) application deadline.
End July / Early Aug 2024	If successful in gaining admission to graduate programme, return to Singapore/NUS.

UNDERGRADUATE COURSES (SEMESTER 1)

Course Code	Course Title	Course Code	Course Title
BT2102	Data Management and Visualisation	BT4212	Search Engine Optimization and Analytics
BT4221	Big Data Techniques and Technologies	BT4222	Mining Web Data for Business Insights
BT4240	Machine Learning for Predictive Data Analytics	CS2030	Programming Methodology II
CS2040C	Data Structures and Algorithms	CS2100	Computer Organisation
CS2104	Programming Language Concepts	CS2107	Introduction to Information Security
CS2113	Software Engineering & Object-Oriented Programming	CS2220	Introduction to Computational Biology
CS3103	Computer Networks Practice	CS3210	Parallel Computing
CS3219	Software Engineering Principles and Patterns	CS3230	Design and Analysis of Algorithms
CS3235	Computer Security	CS3237	Introduction to Internet of Things
CS3240	Interaction Design	CS3241	Computer Graphics
CS4211	Formal Methods for Software Engineering	CS4212	Compiler Design
CS4223	Multi-core Architectures	CS4224	Distributed Databases
CS4226	Internet Architecture	CS4234	Optimisation Algorithms
CS4236	Cryptography Theory and Practice	CS4239	Software Security
CS4243	Computer Vision and Pattern Recognition	CS4246	AI Planning and Decision Making
CS4248	Natural Language Processing	IS3150	Digital Media Marketing
IS3240	Digital Platform Strategy and Architecture	IS4231	Information Security Management

**Please note that actual courses offered during the semester are subject to change.*

MComp admission

Students who would like to be considered for early admission into MComp must complete CP3106 and obtain at least grade A- or above.

Working with an advisor

Each student will work with a professor as their advisor on a topic. Professors have different working styles. Some professors will propose a project to the student, while some would prefer students to work out the project scopes. In general, students can try to read and identify “gaps” in current research (i.e. missing link, interesting work that has not been done, or interesting problems not known beforehand) through extensive readings of literature to form a big picture on what can be done further.

Workload

Each week, students should spend around 4 days on the project.

Students should meet (either online or face-to-face if allowed) and discuss with the advisor for at least an hour each week.

CP3106 INDEPENDENT PROJECT

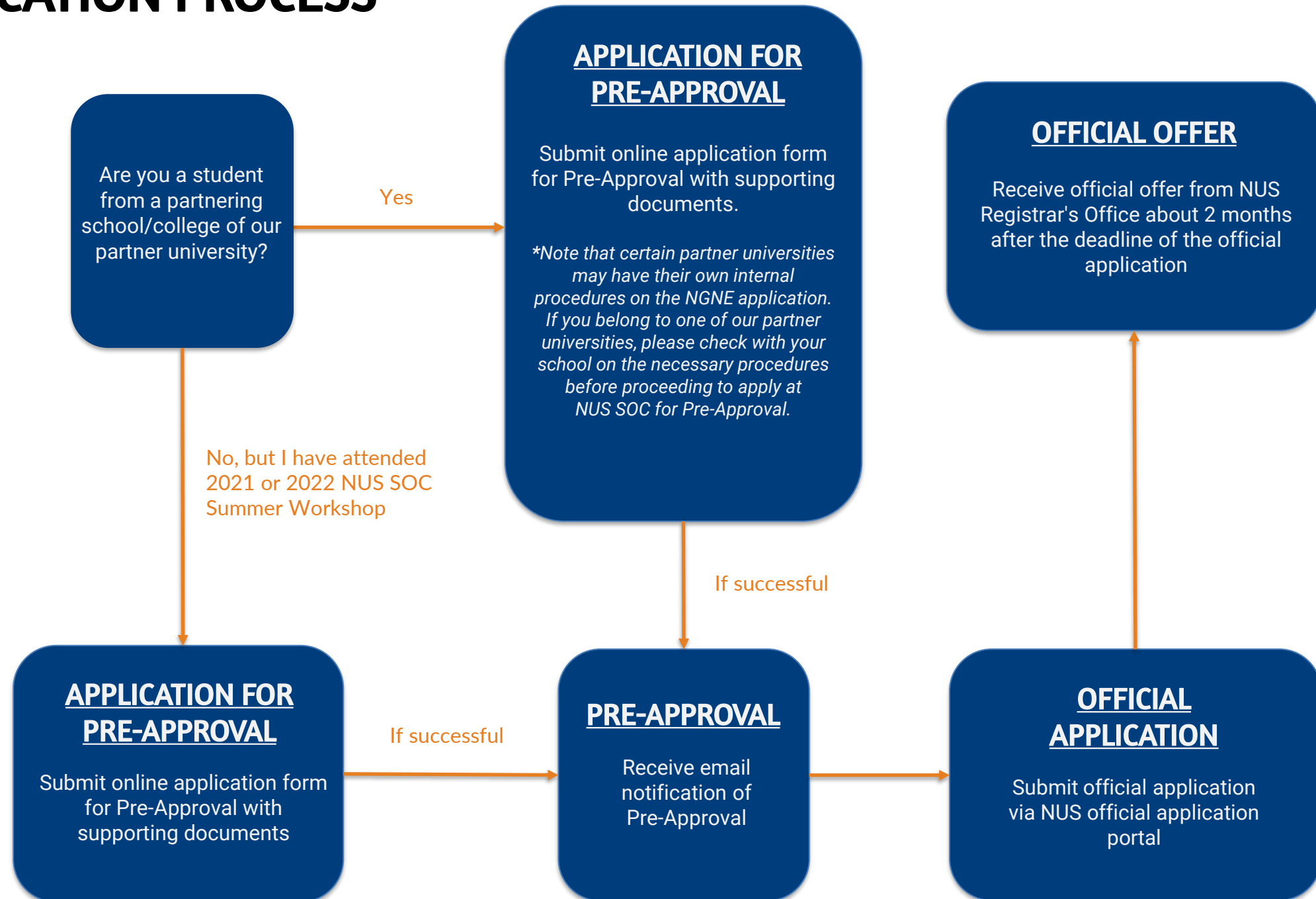
EQUIVALENT TO YOUR GRADUATION PROJECT



02 APPLICATION & PROGRAMME FEE



APPLICATION PROCESS



PRE-APPROVAL

SUPPORTING DOCUMENTS

For August 2023 intake, please submit the [online application form](#) for Pre-Approval before **26 March 2023** with the following supporting documents. Kindly combine all the documents into **one single pdf file**.

Note that you are only allowed to make **ONE** submission - no further amendments will be accepted once you have submitted the application form. As such, you are advised to check the documents thoroughly and carefully before clicking on the submit button. Applications with missing document(s) or information will not be considered since they will be treated as incomplete applications.

01 ACADEMIC TRANSCRIPT

- Latest academic transcript in English including explanation of grading system, with GPA/average score clearly stated
- If GPA/average score is not stated, you must provide an official certification of GPA/average score from your school

02 NUS SOC SUMMER WORKSHOP TRANSCRIPT

- Compulsory for students from non-partner universities
- Required for students from partner universities only if you have attended any

03 ENGLISH QUALIFICATIONS

- For applicants from non-English medium universities
- Provide a copy of a valid test score of any one of the following:
 - TOEFL
 - IELTS
 - CET6

04 CV IN ENGLISH

- Compulsory for all applicants
- CV is important for project topic / advisor matching
- CV should outline your academic performance, awards and achievements, working / project experience, interest areas, future plans etc.

05 APPROVAL LETTER BY HOME UNIVERSITY

- Only applicable to students from non-partner universities
- Letter should state home university's approval for your participation in the NGNE programme if you are officially offered by NUS

06 CERTIFICATES OF AWARDS/ACHIEVEMENTS

- Optional - applicants may provide certificates of awards or achievements which may support their application

CP3106: PREFERRED ADVISOR



In the Pre-Approval application, you will be asked to indicate your preferences regarding the professor you wish to work with on the CP3106 Independent Project.



You should provide at least 6 preferences for our consideration (you will only work with 1 ultimately – note that your preferences are only for our reference and there is no guarantee that you will always be assigned to an advisor of your preference).



Before you proceed to apply, you are advised to refer to the following links (look under “Regular Faculty Members”) for the profile of SOC academic staff:

Computer Science:

<https://www.comp.nus.edu.sg/about/depts/cs/faculty/>

Information Systems and Analytics:

<https://www.comp.nus.edu.sg/about/depts/disa/faculty/>



OFFICIAL APPLICATION

SUPPORTING DOCUMENTS

If you are successful in the Pre-Approval stage, you will receive a **notification of Pre-Approval** via email, regardless of whether you are from a partner university. Note that you **MUST** receive Pre-Approval from NUS SOC before you can submit the official application at the NUS online application portal. Please submit the official application before **10 April 2023**.

To proceed with the official application, please go to the [NUS Online Application Portal \(OAP\)](#). You will be asked to provide the following [required documents](#) (page 2, "Non-Exchange Students") during the official application:

01 PASSPORT

- Passport showing your particulars, with an expiry date that is valid until the completion of studies at NUS

02 ACADEMIC TRANSCRIPT

- Official Academic Transcript in English including grading explanation issued by your Home University
- The transcript must be endorsed with the university's seal and official signatory

03 CURRENT SEMESTER COURSES

- Provide a record of courses taken in current semester/term

04 STUDENT STATUS LETTER

- Student status letter from your Home University indicating your expected graduation period (i.e. date, month and year) and current student status in the University

05 ENGLISH QUALIFICATIONS

- For applicants from non-English medium universities
- Provide a copy of a valid test score of any one of the following:
 - TOEFL
 - IELTS
 - CET6

06 FINANCIAL PROOF

- Documentary proof of financial support in English certifying financial ability to make payment for the Miscellaneous Student Fees (MSFs) and tuition fees for at least 3 courses for the intended study period.

OFFICIAL APPLICATION

SUPPORTING DOCUMENTS

If you are successful in the Pre-Approval stage, you will receive a [notification of Pre-Approval](#) via email, regardless of whether you are from a partner university. Note that you **MUST** receive Pre-Approval from NUS SoC before you can submit the official application at the NUS online application portal.

To proceed with the official application, please go to the NUS Online Application Portal (OAP). You will be asked to provide the following required documents (page 2, "Non-Exchange Students") during the official application:

01

PAYMENT

- Provide a copy of your current bank statement or a certificate of deposit (存款证明) in English issued by the bank as proof that you (or your parent) have the stated amount in the bank account. If you are not the account holder indicated in the bank statement, attach another document stating your relationship with the account holder.

You may submit a **current bank statement** (original, certified true copy or electronically generated statements will be accepted) OR a **certificate of deposit (存款证明) in English** issued by the bank as proof that you (or your parent) have the stated amount in the bank account. If you are not the account holder indicated in the bank statement, attach another document stating your relationship with the account holder.

If you are studying in NUS for **two semesters**, the documentary proof of financial support should certify your financial ability to make payment for the Miscellaneous Student Fees (MSFs) and tuition fees for at least **6 courses**.

For the actual rates of MSF and tuition fees, please refer to this [page](#).

04

STUDENT

- Student's current status in the University indicating your expected graduation period (i.e. date, month and year) and current student status in the University

- Provide a copy of your English test score of any one of the following:
 - TOEFL
 - IELTS
 - CET6

03

CURRENT SEMESTER COURSES

- Provide a record of courses taken in current semester/term

06

FINANCIAL PROOF

- Documentary proof of financial support in English certifying financial ability to make payment for the Miscellaneous Student Fees (MSFs) and tuition fees for at least 3 courses for the intended study period.

NGNE ESTIMATED EXPENSE

TUITION FEES (PER SEMESTER)*

Module Fee (S\$3,880 x 3 modules)	~S\$11,640
Student Services Fee	~S\$78
Health Service Fee	~S\$69

**Click [here](#) to check the latest tuition fees.
Note that fees may be subject to revision from time to time.*

LIVING EXPENSE (PER MONTH)**

Estimated Living Expenses	~S\$1,000
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***Click [here](#) to take a look at a simple breakdown of the estimated living expenses.
Note that the costs have been derived based on a conservative estimate. The actual amount could be higher or lower depending on your expenditure and lifestyle patterns.*



03 GRADUATE PROGRAMMES

MASTER OF COMPUTING (MCOMP) ESTIMATED EXPENSE

TUITION FEES BY PROGRAMME

(excluding miscellaneous fees and tax)*

MComp Specialisations

Computer Science

Information Systems

Infocomm Security

Artificial Intelligence

S\$51,000

MComp General Track

S\$61,000

**Above tuition fees are subject to 7% GST (Goods & Services Tax).
For more information on MComp, please visit this [page](#).*

LIVING EXPENSE (PER YEAR)**

Estimated Living Expenses

~S\$12,000

***Click [here](#) to take a look at a simple breakdown of the estimated living expenses.*

Note that the costs have been derived based on a conservative estimate. The actual amount could be higher or lower depending on your expenditure and lifestyle patterns.

PHD PROGRAMME

Students with outstanding performance in NGNE may stand a chance to be offered the NUS SOC PhD Programme should they apply to the PhD programme.

For more information on our PhD programmes, please refer to:

PhD in Computer Science:

<https://www.comp.nus.edu.sg/programmes/pg/phdcs>

PhD in Information Systems:

<https://www.comp.nus.edu.sg/programmes/pg/phdis/>



Financial Assistance in the form of **Research Scholarship** is available, on a competitive basis to all full-time students who meet the minimum criteria.



The Research Scholarship will carry **monthly emoluments**, plus a **full tuition fee subsidy**.



Scholarship holders will receive a monthly allowance, and graduate students who **passed their PhD Qualifying Examination** will be awarded an **additional top-up of S\$500 per month** (for two years) during their PhD candidature.

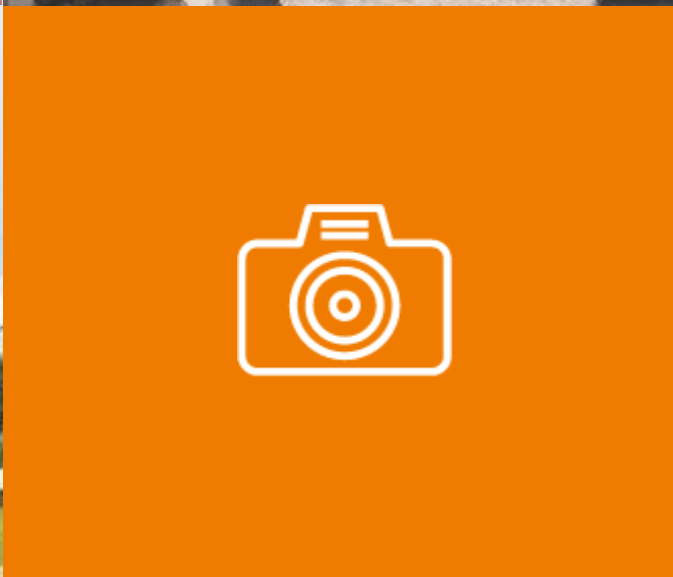


03 NUS FACILITIES



ACCOMMODATION

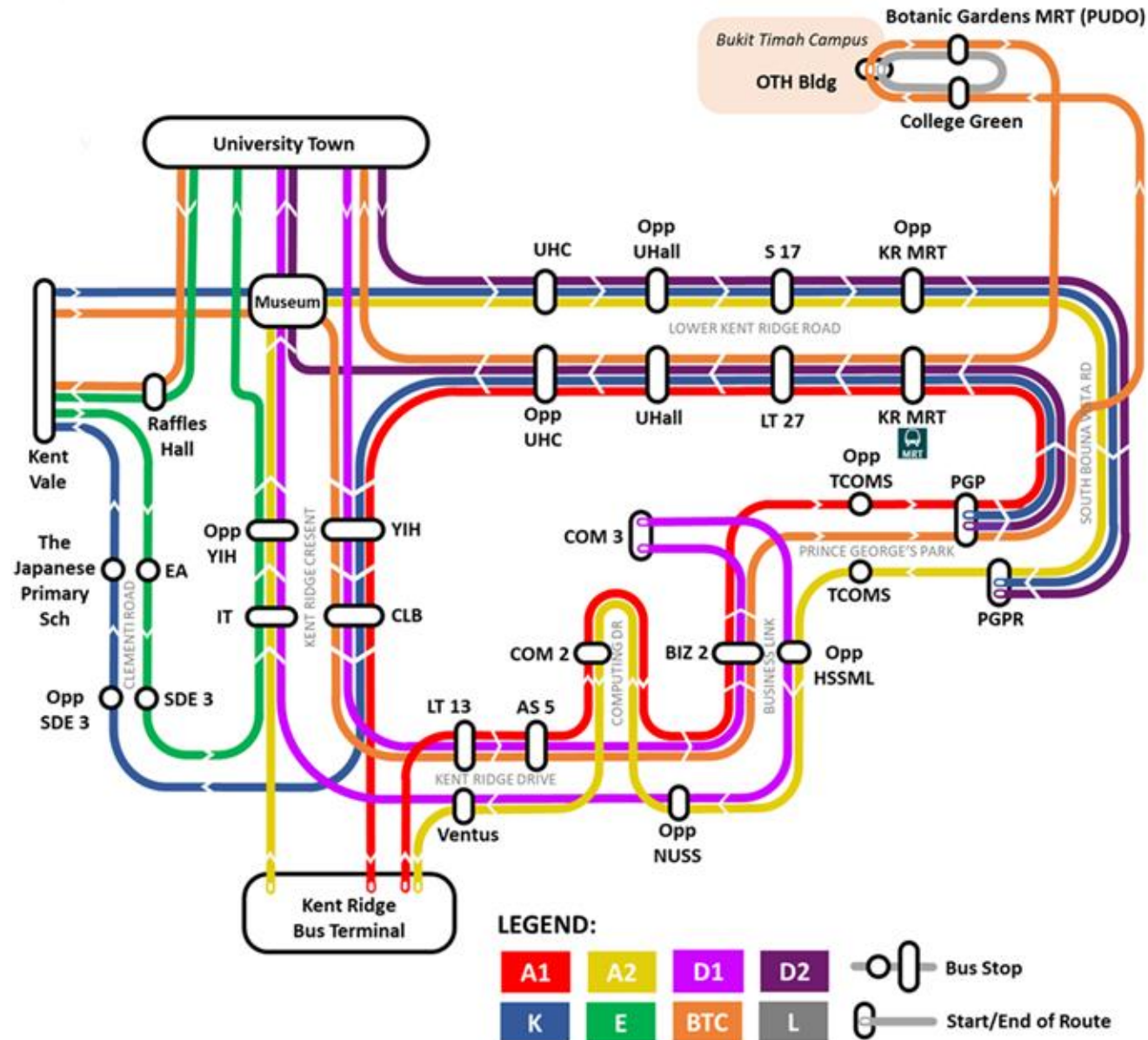
Students will be sourcing for accommodation on their own during the course of study at NUS. With a vast variety of hostel options available in NUS, interested students may apply for on-campus accommodation (subject to availability) to enjoy a conducive living and learning environment. For more information on hostel options, rates and application process, please refer to this [link](#).



NETWORK MAP



Campus Life
University Campus Infrastructure



NUS INTERNAL SHUTTLE BUS

NUS provides free internal shuttle bus services for staff, students and visitors to move around our spacious campuses.

Currently, we have a well-developed internal shuttle system with 8 different bus routes in operation (6 in Kent Ridge campus and 2 in Bukit Timah Campus).



FOOD IN NUS

Kent Ridge Campus

6 canteens | 41 F&B outlets



Bukit Timah Campus

1 canteen | 1 F&B outlet



University Town

2 food courts | 9 F&B outlets



LIBRARIES IN NUS

The NUS Libraries comprises a number of libraries which support teaching and research for various schools, faculties and their graduate divisions as well as administrative units and research institutes.



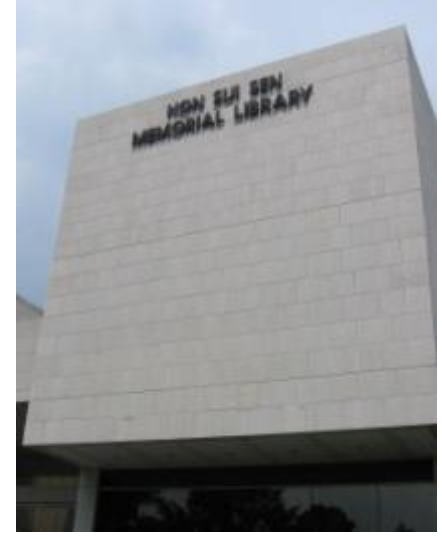
C J Koh Law Library



Central Library



Wan Boo Sow
Chinese Library



Hon Sui Sen
Memorial Library



Medical Library



Music Library



Science Library



04 GETTING AROUND SINGAPORE

GETTING TO KNOW SINGAPORE



Garden City

Weaving nature and greenery into the city



Multiracial Society

4 official languages: English, Chinese, Malay and Tamil



Global Financial Hub

The 3rd largest international financial center after New York and London



Safe and Secure

The 2nd safest city in the world with advanced healthcare system



Tropical Climate

Average temperature between 25 to 32 °C



TRANSPORTATION



Singapore has a developed, well-connected urban traffic network. Students can easily get around via various modes of transport.

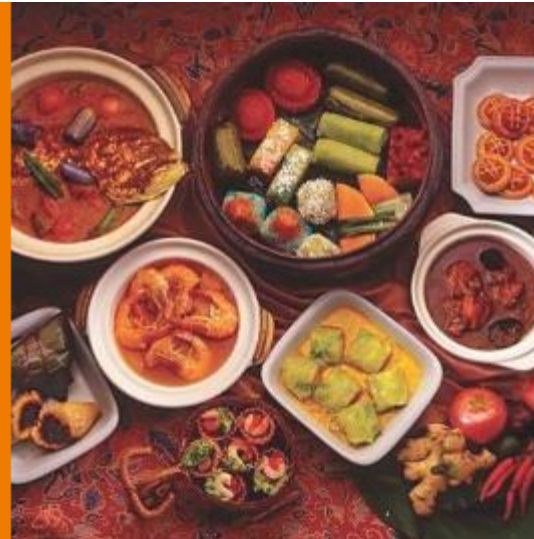
- **Public bus:** Over 310 routes, with a waiting interval of 5-15 minutes
- **MRT:** 5:30am to midnight daily, more than 130 stations
- **LRT:** Route 28.8 kilometers long, with about 40 stations
- **Ride Hailing:** Easily accessible through mobile apps such as ComfortDelGro or Grab

FOOD

Diverse culture and rich history makes Singapore a gourmet paradise.

Food lovers in this country will be spoilt for choice. You can expect to find international cuisine from all over the world. Singapore is known for the wide spread of food choices from Asian countries such as China, India, Malaysia.

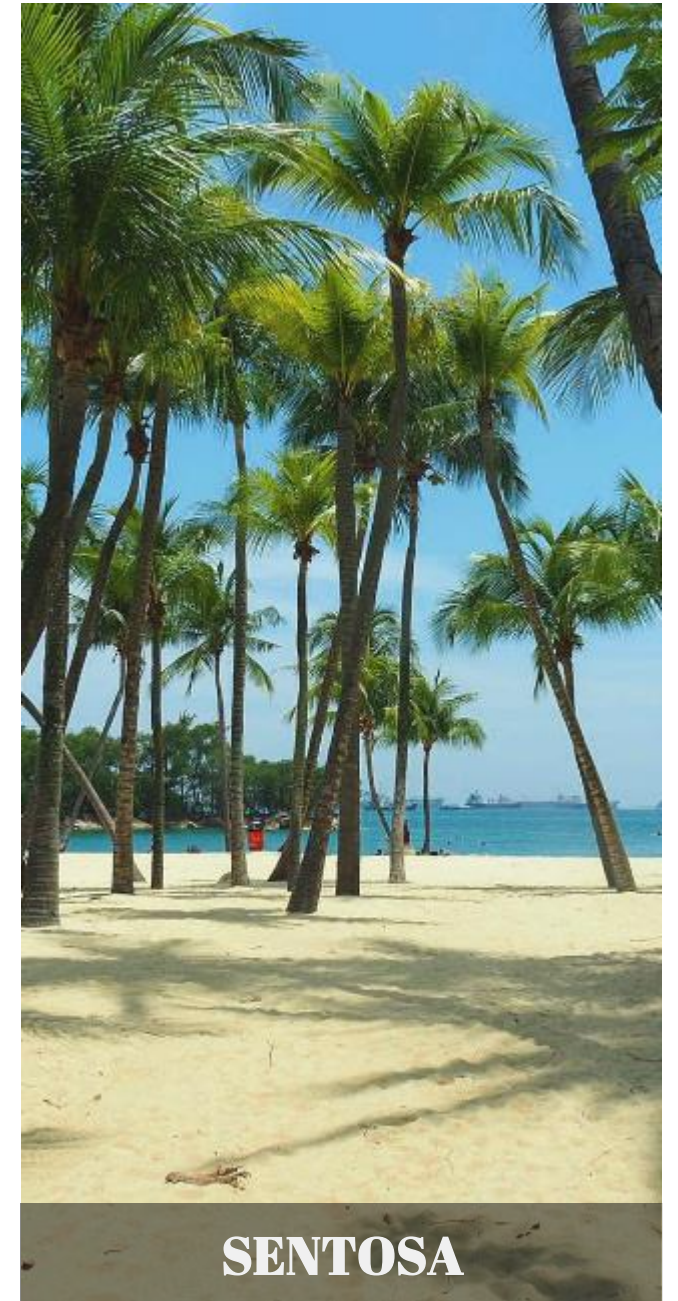
There are many restaurants and food courts in every corner of the NUS campus. Restaurants are clean and tidy. Food is affordable and delicious.





FUN

Singapore has a unique style of architecture, reflecting it's rich heritage. The city is also known for its world-renowned scenic spots, your time outside the classroom would be just as electrifying!



TESTIMONIAL

“ I think the NGNE programme is very helpful. I have experienced the educational environment in a different country. It is very difficult to know what to do at first, for example, I do not know what tutorials are, but gradually I can get used to it. Besides, my supervisor is very nice. She and her students gave me many suggestions on my project. The weekly meeting helps me to correct my mistakes during my research. The coronavirus causes a lot of trouble at the end of the programme, for example, it is difficult to return to China. However, the NUS and NGNE programme staff provide us a lot of assistance during such hard times. Therefore, I think it is very wonderful. ”

AY2019/2020

Participant from Zhejiang University

“ I would like to thank NUS SOC for giving me the opportunity to attend the NGNE programme. Although it was difficult to adapt to the workload at first, I did feel that my professional skills and psychological ability have both improved a lot in the end because of the top-class learning experience and the excellent academic resources provided here. Since I participate in the NGNE programme, I've always had an idea about joining the MComp programme, and regard it as a goal. The experience and gains of this semester strengthen my idea even more. I will always be thankful for this experience and all the help from teachers, staff and classmates. ”

AY2019/2020

Participant from Sichuan University

“ My supervisor was Prof Leong and we worked on a project about dynamic decision making and reinforcement learning on a robot simulation platform. It aims to design a high-level language which allows the users to specify their problem and automatically build a mathematical model and then solve the problem. The topic is very abstract for me at the beginning, but with the guidance of Prof Leong, I successfully understood its meaning, realized the target interface and applied RL algorithms onto the target platform. ”

Prof Leong and everyone in her group are very nice! We arranged group meetings every week, in which we shared the papers read recently, the progress of our projects and new research results with each other. These experiences helped me improve my research ability and I have to say thank you to everyone!

Since this is a special period, it's difficult to return to my home country, so I applied to Prof Leong for an internship this summer and she agrees. It's very happy to have more time with the group and do some related research work here. ”

AY2019/2020

Participant from Xi'an Jiaotong University

“ I have had a wonderful time with Professor Teo, and I would like to express my sincere appreciation to him. From the determination of the project theme, to the daily research and study, and finally to the revision of the report, Prof Teo took countless time to give me careful guidance and continued support from all aspects. Professor Teo's rigorous attitude in scientific research deeply affected me, which I think I will enjoy the benefit all my life. ”

AY2019/2020

Participant from University of Electronic Science and Technology of China

CONTACT US

Contact



Official Website

<https://www.comp.nus.edu.sg/~ngne/>



Official Email

ngne@comp.nus.edu.sg

Other Relevant Pages

NGNE Pre-Approval Application Form

https://nus.syd1.qualtrics.com/jfe/form/SV_3UfQwhZuyaMExIa

NUS Online Application Portal (For NGNE Official Application)

<https://myapplications.nus.edu.sg/>

NUS SOC Summer Workshop

<https://sws.comp.nus.edu.sg/>

NUS SOC Graduate Programmes

<https://www.comp.nus.edu.sg/programmes/#graduate>