

BEng (Computer Engineering)

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

Joint programme offered by
College of Design and Engineering (Dept of ECE) and
School of Computing (Dept of CS)

Dr Jithin Vachery
CEG Year 1 Coordinator



CEG Joint Academic Committee

Assoc Prof Bharadwaj Veeravalli (**Chair, JAC**)

Assoc Prof Colin Tan Keng Yan (**Co-Chair, JAC**)

Prof Peh Li Shiuan

Assoc Prof Wong Weng Fai

Assoc Prof Soh Wee Seng

Dr Sangit Sasidhar (**Year 2 & 3 coordinator**)

Dr Jithin Vachery (**Year 1 Coordinator**)

Dr Boyd Anderson (**Year 4 Coordinator/FYP Coordinator**)

Dr Theivendiram Pranavan (**FYP Coordinator**)

Dr Lin Feng (**IA Coordinator**)



Mr Low Mun Bak (Senior Manager, Admin support for CEG1 & CEG2)

Ms Winnie Chua (Manager, Admin support for CEG3 & CEG4)

Overview of Briefing

- What and Why Computer Engineering (CEG)?
- Programme Objectives
- Degree Programme Requirements
- Industrial Attachment and Special Programmes
- Grade Point System
- Grade-free Scheme
- Academic Advisors



“For our next phase, or Smart Nation 2.0, we aim to sharpen our focus and use **technology** more effectively to **transform** our future and **shape** our nation together.”

PM Lawrence Wong at the launch of Smart Nation 2.0 on 1 October 2024

CEG: Designing Intelligence

- Design computing systems for a smarter world
- Unique multi-disciplinary programme
- Conceive-Design-Implement paradigm
- Industrial attachment, overseas experience

What is Computer Engineering?

- Discipline which **combines** electrical engineering and computer science
- Computer engineers are involved in many aspects of computing, from low level circuit designs using computing devices to large scale integration involving hardware and software systems
- A graduate in this programme is expected to have fundamental knowledge in **mathematics, physics, electronics, digital logic, programming and algorithms, computer architecture, operating systems, networks, embedded systems**
- Relevant **industrial experience** will also complement your knowledge and skills

Characteristics of CEG Graduates

Technical Skills: Technically competent and innovative in solving complex problems and adapt effectively in a fast changing environment

Thinking skills and judgment: Critically think, analyse, and make decisions that give due consideration to global issues in business, ethics, society and environment

Leadership, Team building: Communicate effectively, act with integrity, have inter-personal skills needed to engage in, lead and nurture diverse teams

Attitude: Committed to lifelong learning, resourceful and embrace global challenges and opportunities to make a positive impact in society

The End Goal ????



Exciting Future Awaits!

Embedded Software Engineer, Gateway

T E S L A

Job Category Engineering & Information Technology

Location PALO ALTO, California

Req. ID 94895

Expected Compensation

\$104,000 - \$348,000/annual salary + cash and stock awards + benefits

Job Type Full-time

What to Expect

As a member of the firmware platforms development team, you will be responsible for delivering high quality embedded code running on the processors at the heart of Tesla powertrains, vehicles and energy storage systems. Join a team of deeply knowledgeable engineers that strive to build the most robust and reliable embedded systems using cutting-edge software development tools and practices. You will solve some of the most challenging problems in the embedded software space and change the way the world produces electric vehicles and delivers energy. At Tesla you'll have the ability to take a lofty goal such as 'the vehicle will park itself' into an everyday reality.

What You'll Do

- Deliver high-quality C code in a real-time embedded environment.
- Specify, design, and implement functionality and behaviors of embedded subsystems.
- Design the software architecture and firmware implementation on hardware through integration, test and high volume manufacturing.
- Hands-on hardware bring-up, system debugging and code optimization.
- Make performance and optimization trade-offs to meet product requirements.



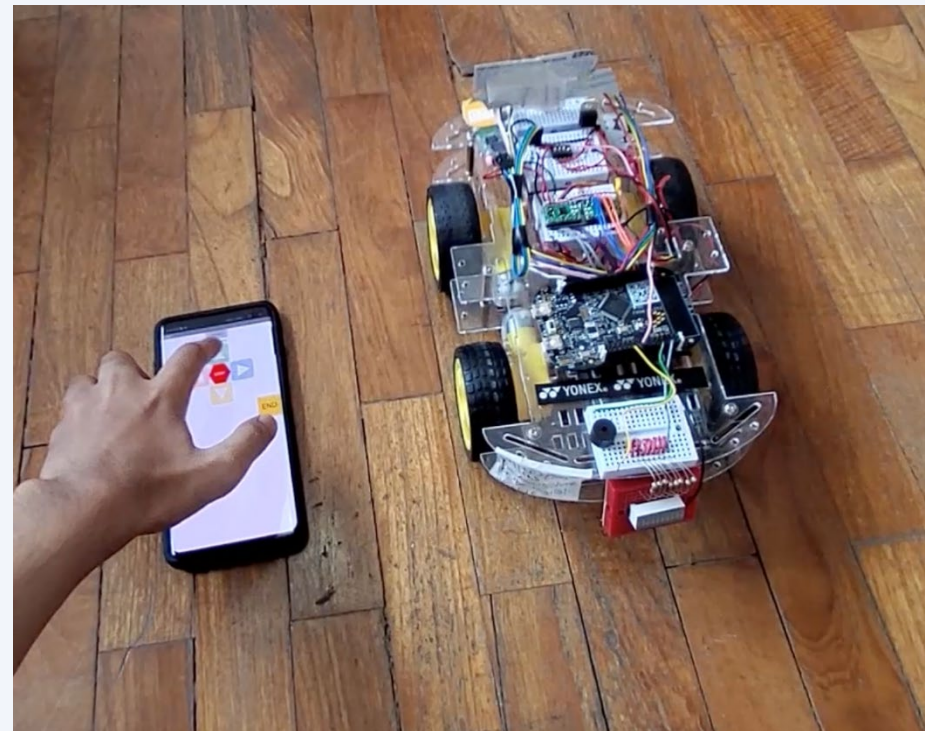
Let's See Your Seniors In Action!

- **CG1111A / CG2111A - Engineering Principles and Practice**
- **CG2271 – Real-Time Operating Systems**
- **CG4002 – Capstone Project**



Let's See Your Seniors In Action!

- **CG1111A / CG2111A - Engineering Principles and Practice**
- **CG2271 – Real-Time Operating Systems**
- **CG4002 – Capstone Project**



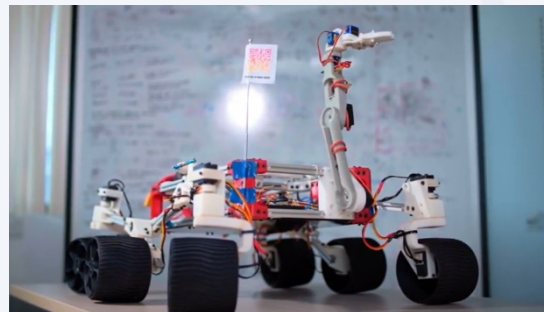
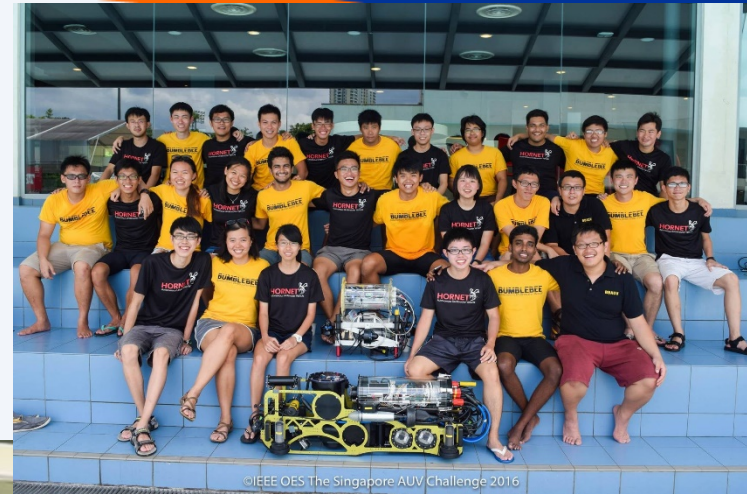
Let's See Your Seniors In Action!

- **CG4002 – Capstone Project**



Growth Opportunities

- Internships
- Competitions
 - Bumblebee
 - NUS Formula SAE
 - NUS RoboMaster
 - NUS Rover Team
- Hackathon





Some FAQ (not covered in slides)

1. What laptop should I get?
2. Transition from NS to Uni
3. Career Guidance
4. Daily Effort



Curriculum at a Glance (Cohort AY2025/6 onwards)

- The Computer Engineering programme adopted a new undergraduate curriculum structure since AY2021/2022, with a recent update for students joining us from AY2025/2026 onwards.
- The changes represent an opportunity to update our requirements to remain aligned with the latest accreditation standards set by the **Engineering Accreditation Board (EAB)**.
- Students Should complete a total of **160 units** (or the equivalent of 40 courses).

Curriculum at a Glance (Cohort AY2025/6 onwards)

Students should complete a total of 160 units (or the equivalent of 40 courses), comprising:

Common Curriculum:	40 units
Primary Major:	80 units
Unrestricted Electives:	40 units

These aim to provide our students with a comprehensive and well-rounded education, preparing them for success in their chosen careers and beyond.

Unrestricted Electives

can expand your horizons, with over 4000 options across CDE and NUS at your fingertips.



10 courses



Primary Major

offers in-depth education in your chosen discipline and set yourself up for future success, wherever your passions take you!



20 courses



Common Curriculum

gives you a solid foundation so you can maximise opportunities to advance your career, regardless of your discipline.



10 courses

Curriculum at a Glance (Cohort AY2025/6 onwards)

Use the Unrestricted Electives wisely to build your own degree by doing a

- Second Major,
- Minor(s),
- Specialisation(s)
- Go deeper into Computer Engineering by taking more technical electives.

Unrestricted Electives

can expand your horizons, with over 4000 options across CDE and NUS at your fingertips.



10 courses



Primary Major

offers in-depth education in your chosen discipline and set yourself up for future success, wherever your passions take you!



20 courses



Common Curriculum

gives you a solid foundation so you can maximise opportunities to advance your career, regardless of your discipline.



10 courses

Programme Components	Courses CEG AY25/26 intake		Units
Common Curriculum Requirements	<ul style="list-style-type: none">▪Singapore Studies▪Cultures and Connections▪Communities and Engagement▪Critique and Expression▪Digital Literacy▪Data Literacy▪Design Thinking	<ul style="list-style-type: none">▪Maker Space▪Artificial Intelligence▪Project Management	40
Primary Major	<u>Engineering Core (20Units)</u> <ul style="list-style-type: none">▪MA1511 Engineering Calculus (2Units)▪MA1512 Diff Eqns for Engrg (2Units)▪MA1508E Linear Algebra for Engrng (2Units)▪EG2401A Engg Professionalism (2Units)▪CP3880 ATAP (12Units) or EG3611A (10Units) <u>CEG Discipline Core (60Units)</u> <ul style="list-style-type: none">▪CG1111A EPP1▪CG2111A EPP II▪CS1231 Discrete Structures▪CG2023 Signals & Systems	<u>CEG Major (continued)</u> <ul style="list-style-type: none">▪CG2027 Transistor level Digital Circuits (2Units)▪CG2028 Computer Organisation (2Units)▪CG2271 Real-time Operating Syst▪CG3201 Machine Learning & Deep Learning▪CG3207 Computer Architecture▪CS2040C Data Structures & Algo▪CS2107 Intro to Information Security▪CS2113 Software Engrg & Object-Oriented Programming▪EE2026 Digital Design▪EE4204 Computer Networks▪Intergrated Project (8 units)	80
Unrestricted Electives	<ul style="list-style-type: none">• CEG Technical Electives• Build Your Own Degree		40
Total Units for Programme Requirements			160

Possible Schedule for CEG AY2025/26 Direct Intake (with 6-months IA in Year 3, Sem 1)

Note: advanced courses usually have pre-requisites!

RECOMMENDED STUDY SCHEDULE for CEG AY2025 INTAKE

CEG AY2025/26 Direct Intake (with Industrial Attachment in Year 3)

Sem 1	Sem 2	Sem 3	Sem 4	Sem 5 [^]	Sem 6	Sem 7	Sem 8
CG1111A EPP1	CG2111A EPP2	CS2040C Data Structures & Algorithms	CG2023 Signals & Systems	CP3880 ATAP (12 units) OR EG3611A IA (10 units)	CG2027 (2 units) and CG2028 (2 units)	CG4002 CEG Capstone Project (8 units) OR FYP (over 2 sem) via CG4001 / CP4106 / EE4002R/EE4002D	FYP OR UE6 (if took CG4002 to fulfil Integrated Proj)
CS1010 Programming Methodology	CS1231 Discrete Structures	CS2107 Introduction to Information Security	CS2113 Software Engrg & OOP		CG3201 Machine Learning & Deep Learning		UE7 OR FYP via CG4001
EG1311 Design and Make	DTK1234 Design Thinking	EE2026 Digital Design	CG2271 RTOS		PF1101A Project Management & Finance	CG3207 Computer Architecture	UE8
MA1511 Engrg Calculus (2 units)	MA1508E Linear Algebra for Engrg	GEC1xxx Cultures and Connections	EE2211 Intro to Machine Learning OR EE2213 Intro to AI	EG2401A Engrg Profsm (2 units)	CDE2501 Liveable Cities (SS pillar)	EE4204 Computer Networks	UE9
MA1512 Diff Eqn for Engrg (2 units)	GEA1000 Data Literacy	ES2631 Critique and Communication of Thinking and Design	UE2	C&E pillar (2 units)	C&E pillar (2 units)	UE5	UE10
ES1103* OR UE1				UE3 (2 units, if took ATAP)	UE4 e.g. ST2334	UE6 (if took FYP to fulfil Integrated Proj)	
20 units	20 units	20 units	20 units	18 units	22 units	20 units	20 units
TOTAL (MINIMUM) GRADUATION REQUIREMENTS = 160 units							

[^]Students on Industrial Attachment (IA) are allowed to take (up to) 20 units workload, including course that are offered in the evenings (subject to approvals and availability). Depending on the preferred semester for IA, the course for sem 5 & 6 may be mutually swapped. Students who prefer not to/are unable to take evening course(s) during IA, should take course(s) in the Special Terms (so as not to delay graduation).

Important:

- The two General Elective Courses (GE) and ten Unrestricted Elective Courses (UE) can be taken in any semester; the above serves as a guide
- Students are encouraged to use the UEs, totalling 40 units, to fulfil Specialisation (SPN) / Technical Elective (TE) / 2nd Major / Minor, etc. You will need to plan in advance and fulfil the pre-requisite(s) of the courses required for your intended SPN / TE / 2nd Major / Minor.

* If not exempted.

Industrial Attachment (IA)

- Industrial Attachment (IA) is compulsory for Direct students since AY2014/15
- For **AY2025/26** intake: 24/**20** weeks in industry via
 - Either CP3880 ATAP (12 Units) OR
 - EG3611A IA (**10** Units)

Possible Schedule for CEG AY2025/26 Poly Intake

RECOMMENDED STUDY SCHEDULE for CEG AY2025 INTAKE

CEG AY2025/26 Poly Intake (with optional 3-month internship)

Sem 1	Sem 2	Sem 3	Sem 4	May – Jul	Sem 5	Sem 6
CG1111A EPP1	CG2111A EPP2	CS2107 Intro to Info Security	CG2023 Signals & Systems	CP3200 Student Internship Programme OR EG3612 Vacation Industrial Attachment 6 units (UE)	CG4002 CEG Capstone Project (8 units) OR FYP (over two sems) via CP4106 / EE4002R/D	CG3201 Machine Learning and Deep Learning
CS1010 Programming Methodology	CS1231 Discrete Structures	CS2113 Software Engrg & OOP	CG2027 Transistor-level Digital Circuits (2 units)			CDE2501 Liveable Cities
MA1301 Introductory Math (UE1)	CS2040C Data Structures & Algorithms	EE2026 Digital Design	CG2028 Computer Organization (2 units)		CG3207 Computer Architecture	EE4204 Computer Networks
ES1103* OR PC1201 Fundamentals of Physics (UE2)	GEA1000 Data Literacy	ES2631 Critique & Comm of Thinking & Design	CG2271 RTOS		C&E pillar Communities & Engagement	PF1101A Project Management and Finance
GEC1xxx Cultures and Connections	MA1508E Linear Algebra for Engrg	MA1511 Engrg Calculus (2 units)	EE2211 Intro to Machine Learning OR EE2213 Intro to AI		EG2401A Engrg Profsm (2 units)	FYP OR UE5 (if took CG4002)
		MA1512 Diff Eqn for Engrg (2 units)	UE3 or PC1201 (if not exe from ES1103)		UE4 e.g. ST2334	
					UE5 (if took FYP)	
20 units	20 units	20 units	20 units		22 units	20 units
TOTAL (MINIMUM) GRADUATION REQUIREMENTS = 160 units*						

* including Advanced Placement Credits (APCs) for DTK1234, EG1311, IA (10 units) and UE (20 units)

Important:

- Poly students are required to take MA1301 (if not exempted) as bridging Math and PC1201 as bridging Physics.
- Poly students who are exempted from MA1301, will take MA1511 and MA1512 in place, AND will need to take additional UE (to make up the 4 units shortfall).
- Students are encouraged to use the Unrestricted Elective Courses (UE) to read CEG Technical Elective (TE) / Specialisation (SPN) / Minor. You will need to plan in advance, to fulfil the pre-requisite(s) of the courses required for your intended TE / SPN / Minor.
- * If not exempted.

Possible Schedule for CEG AY2025/26 Poly Intake

- Poly students are required to take
 - MA1301 (if not exempted) as bridging Math
 - PC1201 as bridging Physics.
- Poly students who are exempted from MA1301,
 - will take MA1511 and MA1512 in place
 - AND will need to take additional UE (to make up the 4 Units shortfall).

General Education Courses/ University-Level Requirements 24 Units

Aims:

- Broaden students' intellectual horizons
- Develop critical and creative thinking skills
- Promote spoken and written articulatory

Unrestricted Electives

can expand your horizons, with over 4000 options across CDE and NUS at your fingertips.



10 courses



Primary Major

offers in-depth education in your chosen discipline and set yourself up for future success, wherever your passions take you!



20 courses



Common Curriculum

gives you a solid foundation so you can maximise opportunities to advance your career, regardless of your discipline.



10 courses

**Cultures &
Connections**

4 Units
GEC1xxx

**Singapore
Studies**

4 Units
CDE2501

**Communities &
Engagement**

4 Units
[C&E](#)

**Critique &
Expression**

4 Units
ES2631

**Digital
Literacy**

4 Units
CS1010

**Data
Literacy**

4 Units
GEA1000

Mapping of RVRC and UTCP courses to fulfil GE Pillars

RVRC PROGRAMME

THE FOUR COURSES IN THE RVRC PROGRAMME CURRICULUM ARE DESIGNED TO MAP DIRECTLY TO FOUR OF THE SIX GE PILLARS. RVRC STUDENTS WHO READ THE FOUR COURSES WILL FULFIL THE REQUIREMENTS OF THE FOLLOWING GE PILLARS:

- CULTURES AND CONNECTIONS
- CRITIQUE AND EXPRESSION
- SINGAPORE STUDIES
- COMMUNITIES AND ENGAGEMENT

RVRC STUDENTS WILL READ THE REMAINING TWO GE PILLARS OF DATA LITERACY AND DIGITAL LITERACY OUTSIDE THE RVRC PROGRAMME, AS OFFERED BY THE UNIVERSITY OR THEIR HOME FACULTY.

UTCP

THE UTCP IS DESIGNED AS AN ALTERNATIVE PATHWAY TO THE GE PROGRAMME AT NUS. UTCP STUDENTS WHO READ THE FOUR UTCP COURSES (A JUNIOR SEMINAR, AN IDEAS & EXPOSITION COURSE AND TWO SENIOR SEMINARS) WILL FULFIL THE REQUIREMENTS OF THE FOLLOWING FOUR GE PILLARS:

- CULTURES AND CONNECTIONS
- CRITIQUE AND EXPRESSION
- SINGAPORE STUDIES
- COMMUNITIES AND ENGAGEMENT

THE DATA LITERACY AND DIGITAL LITERACY PILLARS WILL NOT BE OFFERED BY THE RCS AND UTCP STUDENTS MAY READ THESE COURSES WITH THEIR FACULTIES.

Unrestricted Elective Courses

40 Units

Aims:

- Explore greater breadth/depth in students' discipline
- Read complementary or contrasting minor/Second Major

Students may use the UE space:

- to read more technical electives
- to take up Specialisations, Second Major or Minors

- Minor
 - Second Major
 - Double Degree
- } Look up the details on host dept's websites & email them/look out for e-blast on application
e.g. Second Major in iDP or Minor in Data Engineering

Poly graduates are exempted from 20 Units UE (as APCs).

Unrestricted Electives
can expand your horizons, with
over 4000 options across CDE
and NUS at your fingertips.



Primary Major
offers in-depth education in your
chosen discipline and set yourself
up for future success, wherever
your passions take you!



Common Curriculum
gives you a solid foundation so
you can maximise opportunities
to advance your career,
regardless of your discipline.



Unrestricted Elective Courses

Minor Programmes (20 Units)

- List of Minor Programmes (more than 50 Minors offered)
 - <http://www.nus.edu.sg/registrar/academic-information-policies/undergraduate-students/special-programmes/minor-programmes>
 - Up to 8 Units (40% of the MC requirements for a Minor) may be used to meet (i) the Minor requirement and (ii) another requirement, e.g., College, Faculty, Major, Second Major, Minor, Specialisation or other requirement.

Double Major / Second Major (40 Units)

- List of Second Majors (more than 25 Second Majors offered):
 - <http://www.nus.edu.sg/registrar/academic-information-policies/undergraduate-students/special-programmes/double-major-programmes>
 - Up to 16 Units (40% of the MC requirements for a Second Major) may be used to meet (i) the Second Major requirement and (ii) another requirement, e.g., College, Faculty, Major, Second Major, Minor, Specialisation or other requirement.

Advisory on Minor programmes

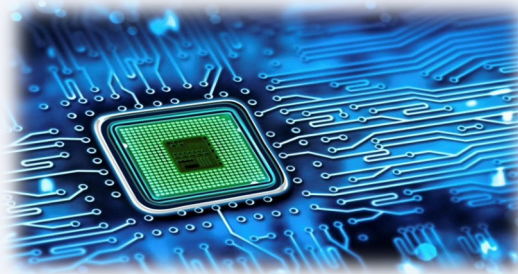
- 'Open' type:
 - Students can declare their intention to do an open minor via Academic Plan Declaration without any prior approval from the Host Dept, no later than the end of the fifth semester of study.
- 'Restricted' type:
 - Students are required to apply to the Host Dept and **obtain approval** (either via Acad Plan Declaration OR email/offline), no later than the end of the fifth semester of study. If approved, Host Dept will then request to update record(s) backend.

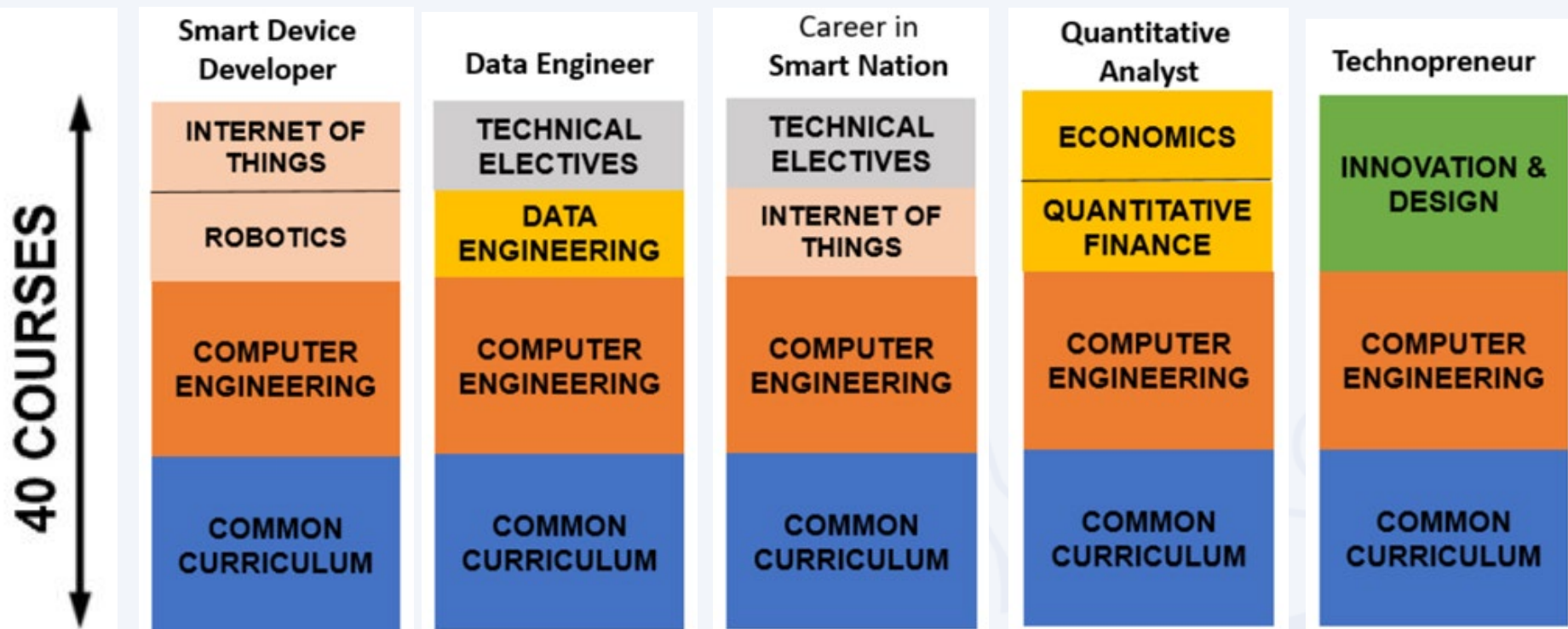
Note: Refer to the [table](#) in the website given earlier, under "Type" column

Specialisations (at least 20 Units)

Specialisations:

- Internet of Things
- Robotics
- Advanced Electronics
- Industry 4.0
- Space Technology





UNRESTRICTED ELECTIVES
SPECIALISATION

MINOR
SECOND MAJOR

MAJOR
COMMON CURRICULUM

*Computer Engineering student can do a minor in Public Health after admission

Advisory on UE space

- Start taking steps to plan how you could use the UE space meaningfully
- You should consider/review how to use your UE
now
- If you do not intend to do a Minor/Second Major, suggest to use your UE space to read more technical elective (TEs) and/or take up a FYP; this will help to make you a more effective engineer.



Grading System

- Graded Basis : A+, A, A-, B+, B, B-, C+, C, D+, D, F
 - Programme Requirements / Minor / 2nd Major/ 2nd Degree courses
- Ungraded Basis
 - Satisfactory / Unsatisfactory (S/U) *option*
 - Completed Satisfactorily (CS) /Completed Unsatisfactorily (CU)

Grade Point System

Grade Point (GP)

A+/A	A-	B+	B	B-	C+	C	D+	D	F
5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0

Cumulative Point Average (GPA)

$$\frac{\sum Unit_i \times GP_i}{\sum Unit_i}$$

Units excluded from GPA

Following are **not** factored into GPA

- Courses taken on S/U & CS/CU basis or
- during exchange,
- NOC,
- IA/Internship
- APCs

Grade Point System

Grade Point (GP)

A+/A	A-	B+	B	B-	C+	C	D+	D	F
5.0	4.5	4.0	3.5	3.0	2.5	2.0	1.5	1.0	0

Cumulative Point Average (GPA)

$$\frac{\sum Unit_i \times GP_i}{\sum Unit_i}$$

Degree/Honours Classification: refer to [OUR page](#)

Honours (Highest Distinction)

GPA ≥ 4.5

Honours (Distinction)

GPA 4.0 to 4.49

Honours (Merit)

GPA 3.5 to 3.99

Honours

GPA 3.0 to 3.49

Pass

GPA 2.0 to 2.99

GPA for Continuation and Graduation

- To **graduate**, an undergraduate student must have a minimum GPA of **2.00**.
- To remain in good academic standing, and to continue in an undergraduate programme, a student **may not** have GPA below 2.00 for **two consecutive semesters**.

From third semester onwards ☹️

Academic Standing	
GPA \geq 2.0	Passed/Proceed
GPA < 2.0 for current semester*	Academic Probation
GPA < 2.0 for two consecutive semesters*	Dismissal

*excluding special term

S/U Option

- **S/U option:** obtain either a Satisfactory (S) or an Unsatisfactory (U) record for the course
 - When exercised, excluded from the calculation of your GPA
 - 3-day window to decide on S/U after the release of exam results
 - Irrevocable!

Note: You must score a minimum “D” grade to get “S”. Otherwise your transcript will show “U” (Unsatisfactory) for the course.

“U” also means that the course **cannot** be counted as satisfying a pre-requisite.

S/U Grading Option / Grade-free Scheme **(For AY2025/26 intake and after)**

- Exercise S/U option for **up to 32 Units** (or up to 20 Units for Poly graduates) in the first two years of study;
 - if this is not fully utilised, the S/U option may still be exercised after the second year, for up to **12 units**.
- Once an 'S' or 'U' grade is assigned to a course, it will count towards the 32 Units limit that can be taken on an S/U basis.

The S/U option can be exercised on:

- All level 1000 courses (except for the English for Academic Purposes courses)
- Level 2000 courses with no other NUS courses as pre-requisites (unless otherwise stipulated by the Facs/Depts)

...

i.e. CANNOT exercise S/U option on technical electives

<https://myportal.nus.edu.sg/studentportal/academics/ug/su-homepage.html>

Grade-free Scheme

The S/U option can be exercised on the following courses:

- Centre for Language Studies' language courses at all levels
- Centre for English Language Communication's (CELC) Level 2000 communication course (CS2101, ES2002, ES2007, ES2007S, ES2331, CS2301/IS2101)
- UTown College Programme's (UTCP) Ideas & Exposition 2 (IEM2201-coded)
- You can refer to <https://myportal.nus.edu.sg/studentportal/academics/all/docs/SU-FAQs.pdf> for details

Other Information: Student Exchange Programme

<https://ceg.nus.edu.sg/sep/>

Students who are keen to go for SEP in Year 3 will apply in Year 2 (Sept-Oct). Lots of prior planning required!

<https://www.nus.edu.sg/gro/global-programmes/student-exchange>

Refer for

- General queries
- Application
- Eligibility
- Course Mapping
- Financial Assistance
- etc.

Check out other enrichment programmes like NUS Overseas Colleges (NOC) etc.

Other Information (QET)

3. Foundation Academic English (ES1000) and ES1103 English for Academic Purposes

- The QET is a university-level requirement which must be fulfilled before graduation. Hence if you do not pass your QET, you must register and complete ES1000&/ES1103 EAP **within the first year** of study so that there will be no delay to your graduation.

Who may take QET1 in July?

- All local and international students informed by the Office of University Registrar (OUR) of the requirement to take the QET
- If a student misses their assigned session or is unable to sit for QET1 without a valid reason, they will need to take QET2 at the end of Semester 1.

Other Information (QET)

3. Foundation Academic English (ES1000) and ES1103 English for Academic Purposes

- ES1103 is 4 Units.
- Students may start to register for ES1103 via CourseReg system from Round 1 starting 21 July 2025.

What do the QET results mean?

- Students who obtain Band 1 will have to take **ES1000** followed by ES1103.
- Students who obtain Band 2 will have to take ES1103.
- Students who obtain Band 3 are exempted from these English courses.

Other Information

4. Exemptions for **Polytechnic** graduates of AY2025/26 intake admitted into CEG:

Poly graduates admitted into CEG in AY2025/26 will be granted APC for

- DKT1234 (Design Thinking),
- EG1311 (Design and Make),
- Industrial Attachment (10Units) and
- UE (20Units)

5. Students should not exceed 23 Units (workload) in sem 1

Hence, students who need to take ES1103 (need to register in Round 1) should take it in sem 1 and delay UE to a later semester.

The same goes for students under RVRC/UTCP/other programmes (which require taking certain prescribed course (s) in the first sem).

Limit on Level-1000 courses

- Should **not** read more than 60 Units of level 1000 courses (including Programme/Major, GEs and UEs)
 - The 60 Units limit EXCLUDES
 - CFG1002 Career Catalyst (2 Units),
 - ES1103 English for Academic Purposes (4 Units),
 - Courses under DYOC initiatives and
 - 20 Units UE APCs (for Poly graduates).
- Any Units over this limit will not be counted towards the Units required for graduation (160 Units). However, they will still be counted/used towards GPA computation.

Minimum graded Units

Minimum graded Units (NUS courses with assigned letter-grades 'A+' to 'D', '**CS**' grade or '**S**'-grade) counted towards Degree, Major, and Minor Requirements:

- A minimum of 50% for degree requirements (residency);
- A minimum of 60% for major requirements; and
- A minimum of 16 units for minor requirements
- Only up to 32/20 Units may be accrued from courses on S/U basis.

Limit on level 1 courses : 60 Units max

Timetable

- Check your timetable at

[Timetable schedule for Year 1, Sem 1, AY25-26](#)

- CEG1 students should refer to [CEG Direct](#).
CEG2 (Poly) students should refer to group [CEG Poly](#).

For most students, **3 (for Direct)** and **4 (for Poly)** core courses should be pre-allocated as per C0x;

students should register for ES1103/ES1000 (if applicable).

Course Registration System (CourseReg)

- Please refer to <https://nus.edu.sg/coursereg/> for more info on CourseReg@EduRec.
- The [Academic Plan declaration page](#) is accessible from 14 July 9am (Navigation: [myEduRec](#) > Academics > Acad Plan Appln/Declaration). The Academic Plan declaration user guide is located [here](#).
- All freshmen ('NEW' students) start to select courses from Round 1 i.e. **21 July 2025 onwards**.

Can I drop a course after securing it?

Add new courses	By end of week 1
Drop courses without grade penalty	By end of week 2
Drop courses with ' W ' grade	Week 3, Day 1- last day of recess week
Drop courses with ' F ' grade	Week 7, Day 1 onwards

Administrative Points

Please check your NUS e-mail account for future announcements:

- Your NUS account is E000XXXX@u.nus.edu
- Please indicate your full name and your student ID: A0XXXXXX for identification when you write to us



CEG Prizes and Awards

- **MAS Academic Excellence Prize:** Best Year 2 student pursuing Computing or Business Analytics or Computer Engineering degree at the SoC who has achieved a GPA of at least 3.50. The award recipients must be Singapore Citizens
- Defence Science Technology Agency Gold Medal
- IES Gold Medal
- Lee Kuan Yew Gold Medal
- IEEE Singapore Computer Society Gold Medal and Prize
- IEEE Singapore Computer Society Book Prize
- Halbrecht Associates Prize
- Alcatel-Lucent Telecommunications Prize
- IEEE Control Systems Chapter Prize

Year 2 onwards



Tuition Fees Policy

Tuition Fees Beyond Normal Candidature

- Students who take longer than the normal candidature period* to complete their degree requirements will have to pay partial non-subsidized fees

*Defined as **8 consecutive semesters** for BEng

- MOE tuition grant only covers the normal duration of the degree course
- Details can be found at:
 - <http://www.nus.edu.sg/registrar/administrative-policies-procedures/undergraduate/undergraduate-fees>
 - <https://share.nus.edu.sg/registrar/student/info/FAQ-on-Tuition-Fee-beyond-Normal-Candidature.pdf>

Tuition Fees Policy

Keep track of your academic progress:

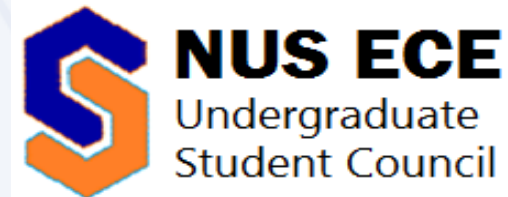
- If you fail some courses, you should re-work your semestral workplans, e.g., take courses in the special term, so as to reduce the likelihood that you may extend beyond 4 years
- Pay great attention to your academic progress and be responsible for your studies

Student-Centric Curriculum

- Your feedback is important to us
- Multi-level feedback to improve CEG programme
 - Course level: end of the semester
 - Programme level: end of every academic year
 - To Cohort representative who can bring up matters during Staff-Student Liaison Committee (SSLC) meetings
- Survey at the beginning of the academic year
 - Your background
 - Your expectations
 - Your ambitions
- Please participate!

Cohort Representatives

- In Sep 2014, the ECE Dept established the **ECE Undergraduate Student Council (USC)** comprising primarily of
 - EE and CEG cohort reps
 - ECE scholars
 - Presidents of the ECE Club, IEEE NUS Student Branch and the IEEE-HKN NUS Chapter
- In accordance with the USC Constitution, **cohort reps will be elected** by the student body within **the first 2 weeks of Semester 1**



More details will be mentioned by the USC later

Academic Advisor

Each CEG student is assigned an Academic Advisor/Mentor (mid-Aug)

- Advisors offer academic advice and counsel
- Advisors will write letters of recommendation for you
- See your Academic Advisor regularly so they can get to know you better

University Health, Wellness & Counselling Centre

<http://www.nus.edu.sg/uhc/>

Emotional & Psychological Well Being

- Anxiety, Depression
- Eating Disorders
- Feelings, Loneliness
- Mental Health, Self-Worth, Shyness, Stress
- Sudden Loss and Grief

Relationship Issues

- Abusive Relationships, Family Stress, Managing Conflicts, Surviving a Breakup

Personal Effectiveness

- Decision Making, Motivation, Test Anxiety, Time Management, Challenges of University Life

Resources

Department

- Peer Tutoring programme
- ECE Caregroup (alternate weeks): goal setting, making new friendships, coping with exam stress

Student support managers

College of Design and Engineering:

School of Computing:

Ms Priya

Ms Adele Chiew

University Counselling Services (UCS) @ UHC

[Email: nuscounselling@nus.edu.sg](mailto:nuscounselling@nus.edu.sg)



How to make the most of and succeed in NUS?

- Plan carefully from your first year, esp. if you are interested in SEP/NOC, Second Major etc.
- Consistent work throughout the semesters, (attend all lectures, tutorials and labs)
- **Plan your projects**
- Get to know people around you, **make friends**
- **Enjoy your studies!**
- Many levels of help throughout the system
 - > Academic Advisors, Year Coordinators, Counselling Centre etc.

How to make the most of and succeed in NUS?

- Sleep well
- Eat well
- Exercise well
- Attend seminars and talks
- Make friends with scholars and profs.



Plagiarism

All students share the responsibility for upholding the academic standards and reputation of the University. Academic honesty is a prerequisite condition in the pursuit and acquisition of knowledge. Academic dishonesty is any misrepresentation with the intent to deceive or failure to acknowledge the source or falsification of information or inaccuracy of statements or cheating at examinations/tests or inappropriate use of resources. There are many forms of academic dishonesty and plagiarism is one of them. Plagiarism is generally defined as the practice of taking someone else's work or ideas and passing them off as one's own (The New Oxford Dictionary of English). The University does not condone plagiarism.



"**Not everything** we try will succeed. Some efforts may fall short of the desired results. When that happens, we must have the **courage** and **integrity** to acknowledge the failure, **learn** from it, and quickly pivot to a new approach. It is this **spirit** of rapid iteration and bold innovation that will propel us forward in our Smart Nation journey."

PM Lawrence Wong at the launch of Smart Nation 2.0 on 1 October 2024



Thank You for your attention!

Questions?

