

Computer Engineering

AY2025 cohort

Accurate as of July 2025

E-Scholars 3-years schedule (CEG)			
Semester 0 (APT)			
EG1311 Design and Make			4
MA1505 Mathematics I (4 units. It is mapped to MA1511 which is 2 units, + 2 units to UE)			4
MA2001 Linear Algebra I (maps to MA1508E)			4
CS1010 Programming Methodology			4
Sub-total			16
Semester 1		Semester 2	
CG1111A Engineering Principles and Practice I	4	CG2111A Engineering Principles and Practice II	4
CS2040C Data Structures & Algorithms	4	CS1231 Discrete Structures	4
MA1512 Differential Equations for Engineering	2	EE2026 Digital Design	4
UTCP #1	4	GEA1000 Quantitative Reasoning with Data	4
UE	4	DTK1234 Design Thinking	4
UE	4	UTCP #2	4
Sub-total	22	Sub-total	24
Semester 3		Semester 4	
[CG2027 Transistor-level Digital Circuits + CG2028 Computer Organization]	4	NUS Overseas College (NOC) experience (20 units)*#	20
CS2107 Introduction to Information Security	4		
CS2113 Software Engineering & Object-Oriented Programming	4		
CG2271 Real-time Operating Systems	4		
EE2211 Introduction to Machine Learning or EE2213 Introduction to Artificial Intelligence	4		
UTCP #3 (Replaces CDE2501)	4		
UE	4		
Sub-total	28	Sub-total	20
Semester 5		Semester 6	
CG3207 Computer Architecture	4	UE or FYP	4
EE4204 Computer Networks	4	CG2023 Signals & Systems	4
CG4002 CEG Capstone Project or FYP (Over 2 sems)	8	CG3201 Machine Learning and Deep Learning	4
PF1101A Project Management and Finance	4	UTCP #4	4
UE	4	UE	4
UE*	2	UE	4
Sub-total	26	Sub-total	24
Grand total		160	

Notes:

1. If APT courses are not cleared, those courses (EG1311, MA1511, MA2001, CS1010) must be cleared during the normal semesters

2. Important rules for NOC:

- You MUST be in Singapore for Visa processing the semester BEFORE going to NOC.

- You MUST have cleared at least 70 units before applying to NOC

3. *If not embarking on NOC, alternate course combinations to fulfil Industrial Attachment requirement (10 units) include:

a) EG3611A Industrial Attachment (10 units)

b) EG3612 Vacation Industrial Attachment / ETP3205 Innovation & Enterprise Internship (6 units) + CDE2605 Undergraduate Research Opportunity (4 units)

c) EG3612 Vacation Industrial Attachment / ETP3205 Innovation & Enterprise Internship (6 units) + CFG2101 NUS Vacation Internship Programme (4 units) Note that EG3612 and EG3611A can be done as long as you have cleared 60 units.

d) EG3612 Vacation Industrial Attachment / ETP3205 Innovation & Enterprise Internship (6 units) + CDE2605R Undergraduate Research Experience (4 units)

Note that UROP (CDE2605) may be taken in any regular semester or special term as long as you are at seniority 2.

4. If you wish to read Common Curriculum courses before your department's recommended semester, please submit an appeal or select the courses from Round 2.

- courses that require appeal: DTK1234, GEA1000, please email:

DTK1234 - dtk1234@nus.edu.sg

GEA1000 - qradmin@nus.edu.sg