

# Engineering Science Programme

AY2023 cohort

Accurate as of June 2023

E-Scholars 3-years schedule (ESP)			
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
CS1010E Programming Methodology			4
<b>Sub-total</b>			16
Semester 1	Semester 2		
ESP2107 Numerical Methods and Statistics	4	GEA1000 Quantitative Reasoning	4
ESP1111 Engineering Principles In-Action	4	DTK1234 Design Thinking	4
MA1512 Differential Equations for Engineering	2	EE2211 Introduction to Machine Learning	4
UTCP #1	4	PF1101 Fundamentals of Project Management	4
UE	4	ESP2111 Sensor System Electronics	4
UE	4	ESP2110 Design Project	4
		UTCP #2	4
<b>Sub-total</b>	22	<b>Sub-total</b>	28
Semester 3	Semester 4		
ME2121 Engineering Thermodynamics & Heat Transfer	4	NUS Overseas College (NOC) experience (20 units)*	20
ESP2106 Principles of Continua	4		
CDE2501 Liveable Cities	4		
CDE2000 Creating Narratives	4		
Choose ONE * PC2020 Electromagnetics for Electrical Engineers * EE2023 Signals and Systems	4		
UTCP #3	4		
<b>Sub-total</b>	24	<b>Sub-total</b>	20
Semester 5	Semester 6		
ESP4901 Research Project	4	ESP4901 Research Project	4
ESP3903 Major Design Project	4	PC2130B Applied Quantum Physics	4
UTCP #4	4	PC3235B Applied Solid State Physics	4
UE (or IE2141 if not staying at RC4)	4	UE	4
UE	4	UE	4
UE	4	UE	4
		EG2401A Engineering Professionalism	2
<b>Sub-total</b>	24	<b>Sub-total</b>	26
			<b>Grand total</b>
			160

Notes:

1. If APT courses are not cleared, those courses must be cleared during the normal semesters

2. Important rules for NOC:

- You MUST be on campus 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 module combinations to fulfil Industrial Attachment requirement (10 units) include:

a) EG3611A Industrial Attachment (10 units)

b) EG3612 Vacation Industrial Attachment (6 units) + EG2605 Undergraduate Research Opportunity (4 units)

c) EG3612 Vacation Industrial Attachment (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.

Note that UROP (EG2605) 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 cc

- courses that may be selected from Round 2: PF1101, EG2501, ES2631 (if not doing UTCP)

- courses that require appeal: EG2401A, DTK1234, GEA1000, EG1311, CDE2000, EE2211, IE2141 (if not staying in RC4)

Please refer to the CDE common curriculum wiki for more info on common course pre-allocation and registration issues.

<https://wiki.nus.edu.sg/display/eng/Pre-allocation+and+Registration+for+Common+Courses+in+CDE>