Engineering Science Programme

AY2022 cohort

Accurate as of June 2022

E-Scholars 3-years schedule (ESP)			
Semester 0 (APT)			
EG1311 Design and Make			4
MA1505 Mathematics I (4 MC but it is mapped to MA1511 which is 2 MC)			4
MA2001 Linear Algebra I (maps to MA1508E)			4
CS1010E Programming Methodology			4
Sub-total			16
Semester 1		**Semester 2**	
ESP2107 Numerical Methods and Statistics	4	GEA1000 Quantitative Reasoning	4
MA1512 Differential Equations for Engineering	2	DTK1234 Design Thinking	4
ESP1111 Engineering Principles In-Action	4	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
Sub-total	22	**Sub-total**	28
Semester 3		**Semester 4**	
ME2121 Engineering Thermodynamics & Heat Transfer	4	NUS Overseas College (NOC) experience (20 MC)*	20
ESP2106 Principles of Continua	4		
EG2501 Liveable Cities	4		
CDE2000 Creating Narratives	4		
Choose ONE * PC2020 Electromagnetics for Electrical Engineers * EE2023 Signals and Systems	4		
EG2101 Pathways to engineering Leadership	2		
UTCP #3	4		
Sub-total	26	**Sub-total**	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
Sub-total	24	**Sub-total**	24
		Grand total	160

Notes:

1. If APT modules are not cleared, those modules 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 MC before applying to NOC
3. *If not embarking on NOC, alternate module combinations to fulfil Industrial Attachment requirement (10MCs) include:
 a) EG3611A Industrial Attachment (10 MCs)
 b) EG3612 Vacation Industrial Attachment (6MCs) + EG2605 Undergraduate Research Opportunity (4MCs)
 c) EG3612 Vacation Industrial Attachment (6MCs) + CFG2101 NUS Vacation Internship Programme (4MCs)
 Note that option (a) can be done in any regular semester as long as you are at seniority 3.
 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 modules before your recommended semester, please submit an appeal or select the modules from Round 2.
 - Modules that may be selected from Round 2: PF1101, ES2631 (if not doing UTCP)
 - Modules that require appeal: DTK1234, GEA1000, EG1311, EG2501, CDE2000, EE2211, IE2141 (if not staying in RC4)