

Chemical Engineering

AY2026 cohort (Jul 2026)

E-Scholars 3-years schedule (ChBE)					
Maths requirement (8u) If passed MA1505 APT -> MA1505 + MA1512 + MA1513 Else MA1511+CE2407A+MA1512+MA1513			Summer EG1311 Design and Make MA1505 Mathematics I CS1010E Programming 12		Units
Internship requirement (10u) EG3611A Industrial Attachment EG3612/ETP3205 + CDE2605 EG3612/ETP3205 + CDE2605R EG3612/ETP3205 + CFG2101 1 sem NOC (~20u)					
Semester 1	Units	Semester 2	Units	Summer	Units
GEA1000 Quantitative Reasoning	4	MA1512 Differential Equations for Engineering	2	CFG2101 NUS Vacation	4
DTK1234 Design Thinking	4	CN2102 Chemical Engineering Principles and Practice II	4	Internship Programme	
MA1513 Linear Algebra with Differential Equations	2	CN2104 Chemical Engineering Thermodynamics	4		
CN1101A Chemical Engineering Principles and Practice I	4	PF1101A Fundamentals of Project Management and Finance	4		
CN2103 Material and Energy Balances	4	UTCP #2	4		
UTCP #1	4	UE	4		
UE	4	UE	4		
Sub-total	26	Sub-total	26	Sub-total	4
Semester 3	Units	Semester 4	Units	Summer	Units
CN2109 Fluid Mechanics	4	CN2105 Reaction Engineering	4	EG3612 Vacation Industrial	6
CN2111 Fundamentals of Biochemical Engineering*	4	CN2110 Heat and Mass Transfer	4	Attachment	
EE2211 Introduction to Machine Learning <i>or</i>	4	CN3105 Machine Learning in Chemical Engineering	4		
EE2213 Introduction to Artificial Intelligence	4	EG2401A Engineering Professionalism	2		
UTCP #3	4	UTCP #4	4		
UE	4	UE	4		
UE	4	UE	4		
UE	4				
Sub-total	28	Sub-total	26	Sub-total	6
Semester 5	Units	Semester 6	Units		
CN4119 Final Year Design Project	4	CN4119 Final Year Design Project	4		
CN3104 Computer-Aided Chemical Process Simulation	4	CN4102 Chemical Engineering Lab	4		
CN3106 Separation Processes	4	UE	4		
CN4101 Process Control and Safety	4	UE	4		
Sub-total	16	Sub-total	16		
			Grand total	160	

Notes:

- If APT courses are not cleared, those courses (EG1311, MA1511, MA1505, CS1010E) must be cleared during the normal semesters
 - Special internship course enrollment arrangement for E-Scholars - EG3612 and EG3611A can be enrolled as long as you have cleared 60 units.
 - 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
 - Note that UROP (CDE2605) may be taken in any regular semester or special term as long as you are at seniority 2.
 - 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