

Industrial & Systems Engineering

AY2026 cohort (Jul 2026)

E-Scholars 3-years schedule (ISE)					
Maths requirement (8u)			Internship requirement (10u)		Summer
If passed MA1505 APT -> MA1505 + MA1512 + MA1513			EG3611A Industrial Attachment		EG1311 Design and Make
If passed MA1505&MA2001 APT -> MA1505+MA1512+MA2001			EG3612/ETP3205 + CDE2605		MA1505 Mathematics I
Else MA1511+MA1512+MA1508E			EG3612/ETP3205 + CDE2605R		MA2001 Linear Algebra I
			EG3612/ETP3205 + CFG2101		CS1010E Programming
			1 sem NOC (~20u)		
					16
Semester 1	Units	Semester 2	Units	Summer	Units
MA1512 Differential Equations for Engineering	2	IE2111 Industrial & Systems Engineering Principles & Practice II	4	CFG2101 NUS Vacation	4
IE1111R Industrial & Systems Engineering Principles & Practice I	4	ST2334 Probability and Statistics	4	Internship Programme	
DTK1234 Design Thinking	4	IE2100 Probability Models with Applications	4		
PF1101A Fundamentals of Project Management and Finance	4	IE2141 Systems Thinking and Dynamics	4		
UTCP #1	4	UTCP #2	4		
UE	4	UE	4		
UE	4	UE*	2		
Sub-total	26	Sub-total	26	Sub-total	4
Semester 3	Units	Semester 4	Units	Summer	Units
IE2110 Operations Research I	4	ISE Technical Elective	4	EG3612 Vacation Industrial	6
IE3101 Statistics for Engineering Applications	4	ISE Technical Elective	4	Attachment	
IE3110R Simulation	4	ISE Technical Elective	4		
CS2040DE Data Structures and Algorithms	4	UTCP #4	4		
EE2211 Introduction to Machine Learning <i>or</i>	4	UE	4		
EE2213 Introduction to Artificial Intelligence	4	UE	4		
UTCP #3	4				
EG2401A Engineering Professionalism	2				
Sub-total	26	Sub-total	24	Sub-total	6
Semester 5	Units	Semester 6	Units		
IE3100R Systems Design Project	4	IE3100R Systems Design Project	4		
ISE Technical Elective	4	UE	4		
UE	4	UE	4		
UE	4	UE	4		
Sub-total	16	Sub-total	16		
			Grand total	160	

Notes:

- If APT courses are not cleared, those courses (EG1311, MA1511, MA1505, MA1508E, 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