

Bachelor of Engineering (Industrial & Systems Engineering)
Recommended Semester Schedule for A-level Students (Cohort AY2025/2026)

Semester 1	Units	Semester 2	Units
CS1010E Programming Methodology	4	ST2334 Probability and Statistics	4
MA1511 Engineering Calculus	2	EG1311/EG1311BE Design and Make	4
MA1512 Differential Equations for Engineering	2	MA1508E Linear Algebra for Engineering	4
IE1111R Industrial & Systems Engineering Principles & Practice I	4	IE2111 Industrial & Systems Engineering Principles & Practice II	4
DTK1234 Design Thinking	4	PF1101A Project Management and Finance	4
UE	4		
Sub-total	20	Sub-total	20
Semester 3	Units	Semester 4	Units
IE2141 Systems Thinking and Dynamics	4	CDE2501 Sustainable Systems for Liveable Cities	4
IE2110 Operations Research I	4	EE2211 Introduction to Machine Learning	4
CS2040DE Data Structures and Algorithms	4	IE2100 Probability Models with Applications	4
GEC/GEN	4	ES2631 Critique and Communication of Thinking and Design	4
UE	4	UE	4
Sub-total	20	Sub-total	20
Semester 5	Units	Semester 6	Units
IE3101 Statistics for Engineering Applications	4	EG3611A Industrial Attachment	10
IE3110R Simulation	4	UE	4
Technical Elective 1	4	UE	4
EG2401A Engineering Professionalism	2		
GEC/GEN	4		
UE	4		
Sub-total	22	Sub-total	18
Semester 7	Units	Semester 8	Units
IE3100R Systems Design Project	4	IE3100R Systems Design Project	4
Technical Elective 2	4	Technical Elective 4	4
Technical Elective 3	4	UE	4
UE	4	UE	4
UE	4	UE	4
Sub-total	20	Sub-total	20

Note:

1. Students who have not passed or been exempted from the Qualifying English Test at the time of admission to the College will have to read ES1000 and/or ES1103. This will be decided by CELC. ES1103 can be used to fulfil UE requirements.
2. IE1111R is double counted to fulfill both the ISE major requirements and data literacy pillar in Common Curriculum. ISE students will need to read an additional 4 Units of UE to meet the minimum 160 Units graduation requirements.
3. Students should not read more than 60 Units of level 1000 courses towards their degree requirements.
4. The above is just a recommended schedule. It is subject to change without prior notice.