## Bachelor of Engineering (Industrial & Systems Engineering) Recommended Semester Schedule for Poly Direct Entry Students (Cohorts AY2024/2025 onwards)

Semester 1	Units	Semester 2	Units
CS1010E Programming Methodology	4	PF1101 Fundamentals of Project Management	4
PC1201 Fundamentals of Physics (UE)	4	GE/UE	4
IE1111R Industrial & Systems Engineering	4	IE2111 Industrial & Systems Engineering	4
Principles & Practice I	4	Principles & Practice II	4
MA1301 Introductory Mathematics (UE)	4	MA1511 Engineering Calculus	2
GE/UE	4	MA1508E Linear Algebra for Engineering	4
		GE/UE	4
Sub-total Sub-total	20	Sub-total	22
Semester 3	Units	Semester 4	Units
CDE2000 Creating Narratives	4	CDE2501 Liveable Cities	4
IE2141 Systems Thinking and Dynamics	4	EE2211 Introduction to Machine Learning	4
IE2110 Operations Research I	4	IE2100 Probability Models with Applications	4
ST2334 Probability and Statistics	4	ES2631 Critique and Communication of	4
		Thinking and Design	
MA1512 Differential Equations for Engineering	2	CS2040/CS2040DE Data Structures and Algorithms	4
Sub-total Sub-total	18	Sub-total	20
Semester 5	Units	Semester 6	Units
IE3100R Systems Design Project	4	IE3100R Systems Design Project	4
IE3101 Statistics for Engineering Applications	4	Technical Elective 2	4
IE3110R Simulation	4	GE/UE	4
Technical Elective 1	4	GE/UE	4
EG2401A Engineering Professionalism	2	GE/UE	4
GE/UE	4		
Sub-total	22	Sub-total 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 Faculty will have to read ES1000 and/or ES1103. This will be decided by CELC. ES1103 can be used to fulfil UE requirements.
- 2. Students should not read more than 60 Units of level 1000 courses towards their degree requirements.
- 3. The above is just a recommended schedule. It is subject to change without prior notice.