

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

<b>Semester 1</b>	<b>Units</b>	<b>Semester 2</b>	<b>Units</b>
CS1010E Programming Methodology	4	PF1101 Fundamentals of Project Management	4
PC1201 Fundamentals of Physics (UE)	4	GE/UE	4
IE1111R Industrial & Systems Engineering Principles & Practice I	4	IE2111 Industrial & Systems Engineering 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
<b>Sub-total</b>	<b>20</b>	<b>Sub-total</b>	<b>22</b>
<b>Semester 3</b>	<b>Units</b>	<b>Semester 4</b>	<b>Units</b>
CDE2000 Creating Narratives	4	EG2501/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 Thinking and Design	4
MA1512 Differential Equations for Engineering	2	CS2040 Data Structures and Algorithms	4
<b>Sub-total</b>	<b>18</b>	<b>Sub-total</b>	<b>20</b>
<b>Semester 5</b>	<b>Units</b>	<b>Semester 6</b>	<b>Units</b>
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		
<b>Sub-total</b>	<b>22</b>	<b>Sub-total</b>	<b>20</b>

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.