Bachelor of Engineering (Engineering Science Programme)

Recommended Semester Schedule for Poly-intake Students
For Cohort AY2022/2023 and AY2023/2024
(Assuming the Maths bridging course MA1301 is required)

Semester 1		Semester 2	
CS1010E Programming Methodology	4	GEA1000 Quantitative Reasoning	4
ESP1111 Engineering Principles In-Action	4	ESP2111 Sensor System Electronics	4
MA1301 Introductory Mathematics*	4	PF1101 Fundamentals of Project Management or	4
PC1201 Fundamentals of Physics*	4	PF1101A Project Management and Finance	
GE course / Unrestricted Elective	4	MA1508E Linear Algebra for Engineering	4
		ESP2110 Design Project	4
Sub-total	**20**	**Sub-total**	**20**
Semester 3		Semester 4	
ES2631 Critique and Communication of Thinking and Design	4	EG2501 / CDE2501 Liveable Cities	4
IE2141 Systems Thinking and Dynamics#	4	EE2211 Introduction to Machine Learning or	4
ESP2107 Numerical Methods and Statistics	4	EE2213 Introduction to Artificial Intelligence	
MA1511 Engineering Calculus	2	PC2130B Applied Quantum Physics	4
MA1512 Differential Equations for Engineering	2	PC3235B Applied Solid State Physics	4
GE course / Unrestricted Elective	4	EG2401A Engineering Professionalism	2
ME2121 Engineering Thermodynamics & Heat Transfer	4	Choose _ONE_	4
		* PC2020 Electromagnetics for Electrical Engineers	
		* EE2023 Signals and Systems	
Sub-total	**24**	**Sub-total**	**22**
Semester 5		Semester 6	
ESP4901 Research Project	4	ESP4901 Research Project	4
ESP2106 Principles of Continua	4	CDE2000 Creating Narratives#	4
ESP3903 Major Design Project	4	GE course / Unrestricted Elective	4
GE course / Unrestricted Elective	4	GE course / Unrestricted Elective	4
GE course / Unrestricted Elective	4	GE course / Unrestricted Elective	4
Sub-total	**20**	**Sub-total**	**20**

GE course - General Education Pillar
*Bridging courses
Advanced Placement Credits & Exemptions for cohort AY2022/2023
Advanced Placement Credits & Exemptions for cohort AY2023/2024

#Read 1 from each basket (AY2023/2024 to complete 1, AY2022/2023 do not need to complete any of these courses):
Basket A: EE3331C or ME2142 or ME3142
Basket B: EE2023 or PC2020
Basket C: ESP3201A
These courses can be used to replace the Systems Thinking, Sustainable Futures and Creating Narratives Pillars

Bachelor of Engineering (Engineering Science Programme)

Recommended Semester Schedule for Poly-intake Students

For Cohort AY2022/2023 and AY2023/2024

(Assuming the Maths bridging course MA1301 is NOT required)

Semester 1		Semester 2	
CS1010E Programming Methodology	4	GEA1000 Quantitative Reasoning	4
ESP1111 Engineering Principles In-Action	4	ESP2111 Sensor System Electronics	4
MA1511 Engineering Calculus	2	PF1101 Fundamentals of Project Management or	4
		PF1101A Project Management and Finance	
MA1512 Differential Equations for Engineering	2	MA1508E Linear Algebra for Engineering	4
PC1201 Fundamentals of Physics*	4	ESP2110 Design Project 2	4
GE course / Unrestricted Elective	4		
Sub-total	**20**	**Sub-total**	**20**
Semester 3		Semester 4	
ES2631 Critique and Communication of Thinking and Design	4	EG2501 / CDE2501 Liveable Cities	4
IE2141 Systems Thinking and Dynamics#	4	EE2211 Introduction to Machine Learning or	4
		EE2213 Introduction to Artificial Intelligence	
ESP2107 Numerical Methods and Statistics	4	PC2130B Applied Quantum Physics	4
GE course / Unrestricted Elective	4	PC3235B Applied Solid State Physics	4
ME2121 Engineering Thermodynamics & Heat Transfer	4	EG2401A Engineering Professionalism	2
		Choose ONE	4
		* PC2020 Electromagnetics for Electrical Engineers	
		* EE2023 Signals and Systems	
Sub-total	**20**	**Sub-total**	**22**
Semester 5		Semester 6	
ESP4901 Research Project	4	ESP4901 Research Project	4
ESP2106 Principles of Continua	4	CDE2000 Creating Narratives#	4
ESP3903 Major Design Project	4	GE course / Unrestricted Elective	4
GE course / Unrestricted Elective	4	GE course / Unrestricted Elective	4
GE course / Unrestricted Elective	4	GE course / Unrestricted Elective	4
Sub-total	**20**	**Sub-total**	**20**

GE course - General Education Pillar

*Bridging course

Advanced Placement Credits & Exemptions for cohort AY2022/2023

Advanced Placement Credits & Exemptions for cohort AY2023/2024

#Read 1 from each basket (AY2023/2024 to complete 1, AY2022/2023 do not need to complete any of these courses):

Basket A: EE3331C or ME2142 or ME3142

Basket B: EE2023 or PC2020

Basket C: ESP3201A

These courses can be used to replace the Systems Thinking, Sustainable Futures and Creating Narratives Pillars