



ENGINEERING SCIENCE PROGRAMME – MINOR + SPECIALISATION

FOR COHORT AY2021/2022 ONWARDS	MC
Common Curriculum	60
Singapore Studies	4
Cultures and Connections	4
Communities and Engagement	4
ES2531 Critical Thinking and Writing	4
CS1010E Programming Methodology	4
GEA1000 Quantitative Reasoning with Data	4
DTK1234 Design Thinking	4
EG1311 Design and Make	4
IE2141 Systems Thinking and Dynamics	4
EE2211 Introduction to Machine Learning	4
EG2501 Liveable Cities	4
Creating Narratives	4
PF1101 Fundamentals of Project Management	4
ESP4901 Research Project	8
Major Requirements	60
MA1511 Engineering Calculus	2
MA1512 Differential Equations for Engineering	2
MA1508E Linear Algebra for Engineering	4
EG2401A Engineering Professionalism	2
EG3611A Industrial Attachment	10
ESP1111 Engineering Principles in Action	4
ESP2111 Sensor System Electronics	4
Choose ONE from the following list: [Please identify 1]	4
<ul style="list-style-type: none"> • PC2020 Electromagnetics for Electrical Engineers • ME2121 Engineering Thermodynamics & Heat Transfer • EE2023 Signals and Systems 	
PC2130B Applied Quantum Physics	4
PC2133 Applied Solid State Physics	4
ESP2106 Principles of Continua	4
ESP2107 Numerical Methods and Statistics	4
ESP2110 Design Project	4
ESP3903 Major Design Project 2	4
CM3296 Molecular Modelling: Theory and Practice	4
Minor in Management	20
ACC1701X Accounting for Decision Makers	4
MKT1705X Principles of Marketing	4
DAO2702 Programming for Business Analytics	4
DBA3803 Predictive Analytics in Business	4
FIN2704X Finance	4
Specialisation in Energy Science & Technology	20
ESP5402 Transport Phenomena in Energy Systems	4
ESP5403 Nanomaterials for Energy Systems	4
ESP4401 Optimization of Energy System	4
PC3242 Nanofabrication and Nano characterization	4
ME3122 Heat Transfer	4
TOTAL	160