## Bachelor of Engineering (Chemical Engineering) Recommended Semester Schedule for Polytechnic Graduate Students (AY2025/2026 Intake)

Based on their polytechnic qualification, polytechnic graduate students will be exempted from Unrestricted Elective Courses (UEC, 20Units), EG3611P Industrial Attachment (10Units), DTK1234 Design Thinking (4Units) and EG1311 Design and Make (4Units)

(The following schedule is for those who have to do MA1301 Introductory Mathematics)

Semester 1	Units	Semester 2	Units
CN1101A Chemical Engineering Principles and Practice I	4	CN2102 Chemical Engineering Principles and Practice II	4
GEA1000 Quantitative Reasoning with Data	4	CN2103 Mass & Energy Balances	4
MA1301 Introductory Mathematics	4	CS1010E Programming Methodology	4
PF1101A Project Management and Finance	4	MA1511 Engineering Calculus	2
GE/UE	4	MA1512 Differential Equations for Engineering	2
		GE/UE	4
Sub-total	20	Sub-total	20
Semester 3		Semester 4	
CN2104 Chemical Engineering Thermodynamics	4	CN2105 Reaction Engineering	4
CN2109 Fluid Mechanics	4	CN2110 Heat and Mass Transfer	4
CDE2501 Liveable Cities	4	CN2111 Fundamentals of Biomolecular Engineering	4
CE2407A Engineering Uncertainty Analysis	2	CN3106 Separation Processes	4
EG2401A Engineering Professionalism	2	EE2211 Introduction to Machine Learning	4
ES2631 Critique and Communication of Thinking and Design	4		
MA1513 Linear Algebra with Differential Equations	2		
Sub-total	22	Sub-total	20
Semester 5		Semester 6	
CN4119 Final Year Design Project (Part 1)	4	CN4119 Final Year Design Project (Part 2)	4
CN3104 Computer-Aided Chemical Process Simulation	4	CN4102 Chemical Engineering Lab	4
CN3105 Machine Learning in Chemical Engineering	4	GE/UE	4
CN4101 Process Control and Safety	4	GE/UE	4
GE/UE	4	GE/UE	4
Sub-total	20	Sub-total	20

## **Bachelor of Engineering (Chemical Engineering)**

## Recommended Semester Schedule for Polytechnic Graduate Students (AY2025/2026 Intake)

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CN1101A Chemical Engineering Principles and Practice I	4	CN2102 Chemical Engineering Principles and Practice II	4
CE2407A Engineering Uncertainty Analysis	2	CN2103 Mass & Energy Balances	4
GEA1000 Quantitative Reasoning with Data	4	CS1010E Programming Methodology	4
MA1513 Linear Algebra with Differential Equations	2	MA1511 Engineering Calculus	2
PF1101A Project Management and Finance	4	MA1512 Differential Equations for Engineering	2
GE/UE	4	GE/UE	4
Sub-total	20	Sub-total	20
Semester 3		Semester 4	
CN2104 Chemical Engineering Thermodynamics	4	CN2105 Reaction Engineering	4
CN2109 Fluid Mechanics	4	CN2110 Heat and Mass Transfer	4
CDE2501 Liveable Cities	4	CN2111 Fundamentals of Biomolecular Engineering	4
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CN3105 Machine Learning in Chemical Engineering	4	GE/UE	4
CN4101 Process Control and Safety	4	GE/UE	4
GE/UE	4	GE/UE	4
Sub-total	20	Sub-total	20