Bachelor of Engineering (Honours) (3707)

Chemical Product Engineering (CEICDH)

T1 Entry 2025 Sample Plan



Year 1			Year 2	Year 3		Year 4	
	PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A		CEIC2000 Materials and Energy Systems		MATH2018 Engineering Mathematics 2D		CEIC4007 Product Design Project Thesis A
Term 1	CHEM1811 Engineering Chemistry 1A	Term 1	CEIC2001 Fluid and Particle Mechanics	Term 1	CHEM3021 Organic Chemistry: Modern Synthetic Strategies	Term 1	CEIC6711 Complex Fluids Microstructure & Rheology
	MATH1131 Mathematics 1A <u>OR</u> MATH1141 Higher Mathematics 1A		MATH2089 Numerical Methods and Statistics		General Education Course		Discipline Elective Course
Term 2	ENGG1811 Computing for Engineers	Term 2	CEIC2002 Heat and Mass Transfer		CEIC8104 Topics in Polymer Technology	Term 2	CEIC4008 Product Design Project Thesis B
	CHEM1821 Engineering Chemistry 1B		CEIC2005 Chemical Reaction Engineering	Term 2	CEIC4000 Environment and Sustainability		CEIC8204 Entrepreneurship & the Innovation Cycle
	MATH1231 Mathematics 1B <u>OR</u> MATH1241 Higher Mathematics 1B		CHEM2021 Organic Chemistry: Mechanisms & Biomolecules		Free Elective Course		Discipline Elective Course
	DESN1000 Engineering Design & Innovation		CHEM2031 Inorganic Chemistry: The Elements		CEIC3001 Advanced Thermodynamics and Separation		General Education Course
Term 3	CHEM2041 Analytical Chemistry: Essential Methods	Term 3	DESN2000 Engineering Design and Practice	Term 3	Free Elective Course	Term 3	Discipline Elective Course

NOTES

Compulsory Training Component: There is a program requirement of 60 days approved Industrial Training ENGG4999

*CEIC1000 is suggested as the free elective

Bachelor of Engineering (Honours) (3707)

Chemical Product Engineering (CEICDH)

T2 Entry 2025 Sample Plan



Year 1			Year 2	Year 3		Year 4	
	ENGG1811 Computing for Engineers	Term 2	CHEM1821 Engineering Chemistry 1B		CEIC2002 Heat and Mass Transfer		CEIC4008 Product Design Project Thesis B
Term 2	MATH1131 Mathematics 1A		MATH2018 Engineering Mathematics 2D	Term 2	CHEM2021 Organic Chemistry: Mechanisms & Biomolecules	Term 2	CEIC8104 Topics in Polymer Technology
	PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A				CEIC2005 Chemical Reaction Engineering		CEIC8204 Entrepreneurship & the Innovation Cycle
	DESN1000 Engineering Design & Innovation	Term 3	CHEM2041 Analytical Chemistry: Essential Methods		CHEM2031 Inorganic Chemistry: The Elements		CEIC4000 Environment and Sustainability
Term 3	MATH1231 Mathematics 1B		DESN2000 Engineering Design and Practice	Term 3	CEIC3001 Advanced Thermodynamics and Separation	Term 3	Discipline Elective Course
			Free Elective Course*				Discipline Elective Course
	CHEM1811 Engineering Chemistry 1A	Term 1	MATH2089 Numerical Methods and Statistics		CEIC4007 Product Design Project Thesis A		Discipline Elective Course
Term 1	CEIC2001 Fluid and Particle Mechanics		Free Elective Course	Term 1	CEIC6711 Complex Fluids Microstructure & Rheology	Term 1	General Education Course
	CEIC2000 Materials and Energy Systems				CHEM3021 Organic Chemistry: Modern Synthetic Strategies		

NOTES

Compulsory Training Component: There is a program requirement of 60 days approved <u>Industrial Training</u> ENGG4999

*CEIC1000 is suggested as the free elective

Bachelor of Engineering (Honours) (3707)

Chemical Product Engineering (CEICDH)

T3 Entry 2025 Sample Plan



Year 1			Year 2	Year 3		Year 4	
	MATH1131 Mathematics 1A <u>OR</u> MATH1141 Higher Mathematics 1A	Term 3	CHEM2041 Analytical Chemistry: Essential Methods		CHEM2031 Inorganic Chemistry: The Elements		CEIC3001 Advanced Thermodynamics and Separation
Term 3	PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A		MATH2089 Numerical Methods and Statistics	Term 3	DESN2000 Engineering Design and Practice	Term 3	General Education Course
	DESN1000 Engineering Design & Innovation		Free Elective Course*				
	ENGG1811 Computing for Engineers	Term 1	CEIC2000 Materials and Energy Systems		CHEM3021 Organic Chemistry: Modern Synthetic Strategies		CEIC4007 Product Design Project Thesis A
Term 1	CHEM1811 Engineering Chemistry 1A		CEIC2001 Fluid and Particle Mechanics	Term 1	Discipline Elective Course	Term 1	CEIC6711 Complex Fluids Microstructure & Rheology
	MATH1231 Mathematics 1B <u>OR</u> MATH1241 Higher Mathematics 1B				General Education Course		Discipline Elective Course
	MATH2018 Engineering Mathematics 2D		CEIC2002 Heat and Mass Transfer		CEIC8104 Topics in Polymer Technology		CEIC4008 Product Design Project Thesis B
Term 2	CHEM1821 Engineering Chemistry 1B	Term 2	CEIC2005 Chemical Reaction Engineering	Term 2	CEIC4000 Environment and Sustainability	Term 2	CEIC8204 Entrepreneurship & the Innovation Cycle
			CHEM2021 Organic Chemistry: Mechanisms & Biomolecules		Free Elective Course		Discipline Elective Course

NOTES

Compulsory Training Component: There is a program requirement of 60 days approved Industrial Training ENGG4999

*CEIC1000 is suggested as the free elective

Bachelor of Engineering (Honours) (3707)

Photovoltaics & Solar Energy Engineering (SOLAAH)

T1 Entry 2025 Sample Plan



Year 1			Year 2	Year 3		Year 4	
	DESN1000 Engineering Design and Innovation	Term 1	SOLA2060 Introduction to Electronic Devices		SOLA3507 Solar Cells		SOLA4951 Research Thesis A
Term 1	MATH1131 Mathematics 1A <u>OR</u> MATH1141 (Higher) Mathematics 1A		MATH2089 Numerical Methods and Statistics	Term 1	Discipline Elective Course	Term 1	ELEC4122 Strategic Leadership and Ethics
	PHYS1121 Physics 1A <u>OR</u> PHYS1131 (Higher) Physics 1A		General Education Course		Strand Elective Course		Free Elective Course
	ENGG1811 Computing for Engineers <u>OR</u> COMP1511 Programming Fundamentals <u>OR</u> COMP1911 Computing 1A		SOLA2051 Project in Photovoltaics and Renewable Energy		SOLA3010 Low Energy Buildings and Photovoltaics	Term 2	SOLA4952 Research Thesis B
Term 2	SOLA1070 Sustainable Energy	Term 2	MATH2018 Engineering Mathematics 2D	Term 2	SOLA3020 Photovoltaic Technology and Manufacturing		SOLA4012 Photovoltaic Systems Design
			Strand Elective Course		Discipline Elective Course		SOLA5057 Energy Efficiency
	ELEC1111 Electrical Circuit Fundamentals	Term 3	DESN2000 Engineering Design and Professional Practice	Term 3	Discipline Elective Course		SOLA4953 Research Thesis C
Term 3	PHYS1221 Physics 1B <u>OR</u> PHYS1231 Higher Physics 1B		SOLA2540 Applied Photovoltaics		Strand Elective Course	Term 3	General Education Course
	MATH1231 Higher Mathematics 1A						Free Elective Course

NOTES

Compulsory Training Component: There is a program requirement of 60 days approved Industrial Training ENGG4999

Bachelor of Engineering (Honours) (3707)

Photovoltaics & Solar Energy Engineering (SOLAAH)

T2 Entry 2025 Sample Plan



Year 1						
	MATH1131 Mathematics 1A					
Term 2	PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A					
	SOLA1070 Sustainable Energy					
	ELEC1111 Electrical Circuit Fundamentals					
Term 3	DESN1000 Engineering Design and Innovation					
	ENGG1811 Computing for Engineers <u>OR</u> COMP1511 Programming Fundamentals <u>OR</u> COMP1911 Computing 1A					
	PHYS1221 Physics 1B <u>OR</u> PHYS1231 Higher Physics 1B					
Term 1	MATH1231 Mathematics 1A <u>OR</u> MATH1241 Higher Mathematics 1A					

	Year 2
	SOLA2051 Project in Photovoltaics and Renewable Energy
Term 2	MATH2018 Engineering Mathematics 2D
	General Education Course
	DESN2000 Engineering Design and Professional Practice
Term 3	SOLA2540 Applied Photovoltaics
	Strand Elective Course
	SOLA2060 Introduction to Electronic Devices
Term 1	MATH2089 Numerical Methods and Statistics

Year 3							
	SOLA3010 Low Energy Buildings and Photovoltaics						
Term 2	SOLA3020 Photovoltaic Technology and Manufacturing						
	Strand Elective Course						
	Strand Elective Course						
Term 3	Discipline Elective Course						
	Discipline Elective Course						
	SOLA3507 Solar Cells						
Term 1	Free Elective Course						

	Year 4
	SOLA4951 Research Thesis A
Term 2	SOLA4012 Photovoltaic Systems Design
	SOLA5057 Energy Efficiency
	SOLA4952 Research Thesis B
Term 3	Discipline Elective Course
	General Education Course
	SOLA4953 Research Thesis C
Term 1	ELEC4122 Strategic Leadership and Ethics
	Free Elective Course

NOTES

Compulsory Training Component: There is a program requirement of 60 days approved Industrial Training ENGG4999

Bachelor of Engineering (Honours) (3707)

Photovoltaics & Solar Energy Engineering (SOLAAH)

T3 Entry 2025 Sample Plan



Year 1			Year 2	Year 3		Year 4	
	ELEC1111 Electrical Circuit Fundamentals	Term 3	DESN2000 Engineering Design and Professional Practice		Discipline Elective Course		SOLA4951 Research Thesis A
Term 3	PHYS1121 Physics 1 A <u>OR</u> PHYS1131 Higher Physics 1A		MATH2089 Numerical Methods and Statistics	Term 3	Discipline Elective Course	Term 3	Discipline Elective Course
	MATH1131 Mathematics 1A <u>OR</u> MATH1141 Higher Mathematics 1A		Free Elective Course		Strand Elective Course		General Education Course
Term 1	PHYS1221 Physics 1B <u>OR</u> PHYS1231 Higher Physics 1B	Term 1	SOLA2060 Introduction to Electronic Devices		SOLA3507 Solar Cells	Term 1	SOLA4952 Research Thesis B
	DESN1000 Engineering Design and Innovation		SOLA2540 Applied Photovoltaics	Term 1	General Education Course		ELEC4122 Strategic Leadership and Ethics
	MATH1231 Mathematics 1B <u>OR</u> MATH1241 Higher Mathematics 1B		MATH2019 Engineering Mathematics 2E OR MATH2018 Engineering Mathematics 2D		Strand Elective Course		Free Elective Course
	ENGG1811 Computing for Engineers <u>OR</u> COMP1511 Programming Fundamentals <u>OR</u> COMP1911 Computing 1A		SOLA2051 Project in Photovoltaics and Renewable Energy		SOLA3010 Low Energy Buildings and Photovoltaics		SOLA4953 Research Thesis C
Term 2	SOLA1070 Sustainable Energy	Term 2	Strand Elective Course	Term 2	SOLA3020 Photovoltaic Technology and Manufacturing	Term 2	SOLA4012 Photovoltaic Systems Design
							SOLA5057 Energy Efficiency

NOTES

Compulsory Training Component: There is a program requirement of 60 days approved Industrial Training ENGG4999