Bachelor of Engineering (Honours) (3707)

Chemical Product Engineering (CEICDH)

T1 Entry 2025 Sample Plan



Year 1		Year 2		Year 3		Year 4	
Term 1	PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A	Term 1	CEIC2000 Materials and Energy Systems	Term 1	MATH2018 Engineering Mathematics 2D	Term 1	CEIC4007 Product Design Project Thesis A
	CHEM1811 Engineering Chemistry 1A		CEIC2001 Fluid and Particle Mechanics		CHEM3021 Organic Chemistry: Modern Synthetic Strategies		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	Term 2	CEIC8104 Topics in Polymer Technology	Term 2	CEIC4008 Product Design Project Thesis B
	CHEM1821 Engineering Chemistry 1B		CEIC2005 Chemical Reaction Engineering		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	Term 3	CEIC3001 Advanced Thermodynamics and Separation	Term 3	General Education Course
Term 3	CHEM2041 Analytical Chemistry: Essential Methods	Term 3	DESN2000 Engineering Design and Practice		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)

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	Term 3	CEIC4000 Environment and Sustainability
Term 3	MATH1231 Mathematics 1B		DESN2000 Engineering Design and Practice	Term 3	CEIC3001 Advanced Thermodynamics and Separation		Discipline Elective Course
			Free Elective Course*				Discipline Elective Course
	CHEM1811 Engineering Chemistry 1A		MATH2089 Numerical Methods and Statistics		CEIC4007 Product Design Project Thesis A		Discipline Elective Course
Term 1	CEIC2001 Fluid and Particle Mechanics	Term 1	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



Term 3 PHYS1121 Physics 1A OR PHYS1131 Higher Physics 1A OR Sengineering Design & Innovation Term Celic 2000 Materials and Energy Systems Term CHEM1811 Analytical Chemistry: Essential Methods Innorganic Ch	CHEM2031 nemistry: The Elements DESN2000 g Design and Practice Term 3	CEIC3001 Advanced Thermodynamics and Separation General Education Course
3 PHYS1131 Higher Physics 1A DESN1000 Engineering Design & Innovation ENGG1811 Computing for Engineers Term CHEM1811 3 Numerical Methods and Statistics 3 Engineering CEIC2000 Materials and Energy Systems Term CEIC2001 Term Discipling		General Education Course
Engineering Design & Innovation ENGG1811 Computing for Engineers Term CHEM1811 Term CEIC2001 Term CEIC2001 Term CEIC2001 Term CEIC2001 Term CEIC2001 Term		
Term CHEM1811 Term CEIC2001 Term CEIC2001 Term Ceic2001 Term Ceic2001 Term Chem1811 Term Ceic2001 Te		
Disciplin	CHEM3021 mistry: Modern Synthetic Strategies	CEIC4007 Product Design Project Thesis A
	ne Elective Course	CEIC6711 Complex Fluids Microstructure & Rheology
MATH1231 Mathematics 1B <u>OR</u> MATH1241 Higher Mathematics 1B General B	Education Course	Discipline Elective Course
	CEIC8104 Polymer Technology	CEIC4008 Product Design Project Thesis B
		CEIC8204 Entrepreneurship & the Innovation Cycle
CHEM2021 Organic Chemistry: Mechanisms & Free E Biomolecules	CEIC4000 Term ent and Sustainability 2	

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