### Engineering

## Engineering (Honours) / Biomedical Engineering (3768)

## **Chemical Engineering (CEICAH)**

## T1 Entry 2025 Sample Plan



Year 1		Year 2		Year 3		Year 4		Year 5	
Term 1	PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A	Term 1	CEIC2000 Materials and Energy Systems	Term 1	CEIC3000 Process Modelling and Analysis	Term 1	CEIC4001 Process Design Project (12 UoC)	Term 1	BIOM4951 Research Thesis A (4 UoC)
	CHEM1811 Engineering Chemistry 1A		CEIC2001 Fluid and Particle Mechanics		<b>CEIC3005</b> Process Plant Design		<b>CEIC3004</b> Process Equipment and Design		BIOM9410 Regulatory Requirements of Biomedical Technology
	MATH1131 Mathematics 1A <u>OR</u> MATH1141 Higher Mathematics 1A		PHSL2121 Principles of Physiology A		Biomedical Engineering Course				Biomedical Engineering Course
	ENGG1811 Computing for Engineers	Term 2	CEIC2002 Heat and Mass Transfer		CEIC3006 Process Dynamics and Control	Term 2	CEIC4000 Environment & Sustainability	Term 2	BIOM4952 Research Thesis B (4 UoC)
Term 2	CHEM1821 Engineering Chemistry 1B		CEIC2005 Chemical Reaction Engineering	Term 2	<b>CEIC3007</b> Chemical Engineering Lab B		Biomedical Engineering Course		BIOM9420 Clinical Laboratory Science
	MATH1231 Mathematics 1B <u>OR</u> MATH1241 Higher Mathematics 1B								Biomedical Engineering Course
	<b>DESN1000</b> Engineering Design & Innovation	Term 3	CEIC2007 Chemical Engineering Lab A	Term 3	CEIC3001 Advanced Thermodynamics and Separation	Term 3	BIOM9311 Mass Transfer in Medicine	Term 3	BIOM4953 Research Thesis C (4 UoC)
Term 3	<b>MATH2018</b> Engineering Mathematics 2D		<b>DESN2000</b> Engineering Design and Practice		Discipline Elective		Biomedical Engineering Course		Biomedical Engineering Course
			MATH2089 Numerical Methods and Statistics		Free Elective*		Biomedical Engineering Course		Biomedical Engineering Course

NOTES

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

\*CEIC1000 is suggested as the free elective

This is intended as a guide only. Courses do not need to be studied in the exact structure that they appear here.

#### Engineering

## Engineering (Honours) / Biomedical Engineering (3768)

# **Chemical Engineering (CEICAH)**

## T2 Entry 2025 Sample Plan



Year 1		Year 2		Year 3		Year 4		Year 5	
Term 2	MATH1131 Mathematics 1A	Term 2	CHEM1821 Engineering Chemistry 1B	Term 2	CEIC2002 Heat and Mass Transfer		CEIC3006 Process Dynamics and Control	Term 2	BIOM4951 Research Thesis A (4 UoC)
	PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A		MATH2018 Engineering Mathematics 2D		CEIC2005 Chemical Reaction Engineering	Term 2	<b>CEIC3007</b> Chemical Engineering Lab B		BIOM9420 Clinical Laboratory Science
							CEIC4000 Environment & Sustainability		Biomedical Engineering Course
	MATH1231 Mathematics 1B		<b>CEIC2007</b> Chemical Engineering Lab A		CEIC3001 Advanced Thermodynamics and Separation		BIOM9311 Mass Transfer in Medicine	Term 3	BIOM4952 Research Thesis B (4 UoC)
Term 3	ENGG1811 Computing for Engineers	Term 3	<b>DESN2000</b> Engineering Design and Practice	Term 3	Biomedical Engineering Course	Term 3	Biomedical Engineering Course		Biomedical Engineering Course
	<b>DESN1000</b> Engineering Design & Innovation		<b>MATH2089</b> Numerical Methods and Statistics		Free Elective*		Biomedical Engineering Course		Biomedical Engineering Course
	CEIC2000 Materials and Energy Systems	Term 1	PHSL2121 Principles of Physiology A	Term 1	CEIC3000 Process Modelling and Analysis	Term 1	CEIC4001 Process Design Project (12 UoC)	Term 1	BIOM4953 Research Thesis C (4 UoC)
Term 1	CEIC2001 Fluid and Particle Mechanics		Discipline Elective		<b>CEIC3004</b> Process Equipment and Design				BIOM9410 Regulatory Requirements of Biomedical Technology
	CHEM1811 Engineering Chemistry 1A		Breadth Elective		<b>CEIC3005</b> Process Plant Design				Biomedical Engineering Course

NOTES

Compulsory Training Component: There is a program requirement of 60 days approved Industrial Training ENGG4999. \*CEIC1000 is suggested as the free elective

Students who begin in Term 2 are permitted to enrol into CHEM1011 and CHEM1021 in place of CHEM1811/1821 or may take a combination of those courses with permission from their course convenor.

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### Engineering

## Engineering (Honours) / Biomedical Engineering (3768)

## **Chemical Engineering (CEICAH)**

## T3 Entry 2025 Sample Plan



Year 1		Year 2		Year 3		Year 4		Year 5	
Term 3	ENGG1811 Computing for Engineers	Term 3	MATH2089 Numerical Methods and Statistics	Term 3	<b>CEIC2007</b> Chemical Engineering Lab A	Term 3	CEIC4000 Environment & Sustainability	Term 3	BIOM4951 Research Thesis A (4 UoC)
	MATH1131 Mathematics 1A <u>OR</u> MATH1141 Higher Mathematics 1A		Discipline Elective		<b>DESN2000</b> Engineering Design and Practice		Biomedical Engineering Course		BIOM9311 Mass Transfer in Medicine
	PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A		Free Elective*		CEIC3001 Advanced Thermodynamics and Separation		Biomedical Engineering Course		Biomedical Engineering Course
	<b>DESN1000</b> Engineering Design & Innovation	Term 1	CEIC2000 Materials and Energy Systems		CEIC3000 Process Modelling and Analysis	Term 1	CEIC4001 Process Design Project (12 UoC)	Term 1	BIOM4952 Research Thesis B (4 UoC)
Term 1	CHEM1811 Engineering Chemistry 1A		CEIC2001 Fluid and Particle Mechanics	Term 1	CEIC3004 Process Equipment and Design				<b>BIOM9410</b> Regulatory Requirements of Biomedical Technology
	MATH1231 Mathematics 1B <u>OR</u> MATH1241 Higher Mathematics 1B		PHSL2121 Principles of Physiology A		<b>CEIC3005</b> Process Plant Design				Breadth Elective
	CHEM1821 Engineering Chemistry 1B	Term 2	CEIC2002 Heat and Mass Transfer	Term 2	CEIC3006 Process Dynamics and Control	Term 2	Biomedical Engineering Course	Term 2	BIOM4953 Research Thesis C (4 UoC)
Term 2	MATH2018 Engineering Mathematics 2D		CEIC2005 Chemical Reaction Engineering		<b>CEIC3007</b> Chemical Engineering Lab B		Biomedical Engineering Course		BIOM9420 Clinical Laboratory Science
							Biomedical Engineering Course		Biomedical Engineering Course

NOTES

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

\*CEIC1000 is suggested as the free elective

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