Engineering Engineering (Honours) / Biomedical Engineering (3768) Robotics and Mechatronic Engineering (MTRNBH)



T1 Entry 2025 Sample Plan

Year 1		Year 2		Year 3		Year 4		Year 5		
Term 1	Enginee	DESN1000 ering Design and Innovation		MATH2019 Engineering Mathematics 2E <u>OR</u> MATH2018 Engineering	Term 1	MTRN3210 Feedback Control Systems	Term 1	MTRN3020 Modelling and Control of Mechatronic Systems	Term 1	BIOM4951 Research Thesis A (4 UoC)
	PH) PHYS	YS1121 Physics 1A <u>OR</u> S1131 Higher Physics 1A	Term 1	Mathematics 2D MATH2089		PHSL2121 Principles of Physiology A		MTRN4010 Advanced Autonomous Systems		BIOM9410 Regulatory Requirements of Biomedical Technology
	MATH MATH1′	11131 Mathematics 1A <u>OR</u> 141 Higher Mathematics 1A		ELEC2141 Digital Circuit Design		Free Elective		Recommended Discipline Elective		Biomedical Engineering Course
Term 2	MATH MATH12	11231 Mathematics 1B <u>OR</u> 241 Higher Mathematics 1B	Term 2	COMP2521 Data Structures and Algorithms	Term 2	MTRN3100 Robot Design	Term 2	MTRN4230 Robotics	Term 2	BIOM4952 Research Thesis B (4 UoC)
	Prog	COMP1511 gramming Fundamentals		MMAN2300 Engineering Mechanics 2		DESN3000 Strategic Design Innovation		Biomedical Engineering Course		BIOM9420 Clinical Laboratory Science
				MMAN2700* Thermodynamics						Biomedical Engineering Course
	Des	MMAN1130 sign and Manufacturing	Term 3	DESN2000 Engineering Design and Professional Practice	Term 3	MTRN3500 Computing Applications in Mechatronics Systems	Term 3	Biomedical Engineering Course	Term 3	BIOM4953 Research Thesis C (4 UoC)
Term 3	Er	ENGG1300 ngineering Mechanics		MTRN2500 Computing for Mechatronic Engineers		ANAT2511 Fundamentals of Anatomy		Biomedical Engineering Course		Biomedical Engineering Course
	Electr	ELEC1111 rical Circuit Fundamentals				Discipline Elective		Biomedical Engineering Course		Discipline Elective
NOTES	Compulsory Training Component: There is a program requirement of 60 days approved <u>Industrial Training</u> ENGG4999. This is intended as a guide only. Courses do not need to be studied in the exact structure that they appear here.									

*Students can take MMAN2700/ENGG2400 or ENGG2500 but MMAN2700 is recommended for this stream.

Information is correct as of October 2024 and is based on proposed prerequisites and course availability. This is to be used as a guide only and does not replace individual advice. Refer to the Handbook and Class Timetable for the relevant term to check availability for these courses. Contact The Nucleus: Student Hub for further assistance. CRICOS Provider Code 00098G

Engineering Engineering (Honours) / Biomedical Engineering (3768) Robotics and Mechatronic Engineering (MTRNBH)



T2 Entry 2025 Sample Plan

Year 1		Year 2		Year 3		Year 4		Year 5		
Term 2	PH PHY	HYS1121 Physics 1A <u>OR</u> /S1131 Higher Physics 1A	Term 2	MATH2019 Engineering Mathematics 2E <u>OR</u> MATH2018 Engineering Mathematics 2D	Term 2	DESN3000 Strategic Design Innovation	Term 2	MTRN4230 Robotics	Term 2	BIOM4951 Research Thesis A (4 UoC)
	MATI MATH [,]	H1131 Mathematics 1A <u>OR</u> 1141 Higher Mathematics 1A		COMP2521 Data Structures and Algorithms		MMAN2300 Engineering Mechanics 2		Free Elective		BIOM9420 Clinical Laboratory Science
	De	MMAN1130 esign and Manufacturing				MTRN3100 Robot Design		Biomedical Engineering Course		Biomedical Engineering Course
Term 3	Pro	COMP1511 ogramming Fundamentals		DESN2000 Engineering Design and Professional Practice	Term 3	MTRN3500 Computing Applications in Mechatronics Systems	Term 3	Biomedical Engineering Course	Term 3	BIOM4952 Research Thesis B (4 UoC)
	E	ENGG1300 Engineering Mechanics	Term 3	MTRN2500 Computing for Mechatronic Engineers		ANAT2511 Fundamentals of Anatomy		Biomedical Engineering Course		Biomedical Engineering Course
	MATI MATH [,]	H1231 Mathematics 1B <u>OR</u> 1241 Higher Mathematics 1B		MATH2089 Numerical Methods and Statistics		Recommended Discipline Elective				Biomedical Engineering Course
Term 1	Elec	ELEC1111 trical Circuit Fundamentals		ELEC2141 Digital Circuit Design	Term 1	MTRN3210 Feedback Control Systems	Term 1	MTRN4010 Advanced Autonomous Systems	Term 1	BIOM4953 Research Thesis C (4 UoC)
	Engine	DESN1000 eering Design and Innovation	Term 1	PHSL2121 Principles of Physiology A		MTRN3020 Modelling and Control of Mechatronic Systems		BIOM9410 Regulatory Requirements of Biomedical Technology		Biomedical Engineering Course
				MMAN2700* Thermodynamics				Discipline Elective Course		Discipline Elective Course
Compulsory Training Component: There is a program requirement of 60 days approved <u>Industrial Training</u> ENGG4999. This is intended as a guide only. Courses do not need to be studied in the exact structure that they appear here.										

**Students can take MMAN2700/ENGG2400 or ENGG2500 but MMAN2700 is recommended for this stream.

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Engineering Engineering (Honours) / Biomedical Engineering (3768) Robotics and Mechatronic Engineering (MTRNBH)

T3 Entry 2025 Sample Plan

Year 1			Year 2		Year 3		Year 4		Year 5	
Term 3	PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A		DESN2000 Engineering Design and Professional Practice	Term 3	MTRN3500 Computing Applications in Mechatronics Systems	Term 3	Free Elective	Term 3	BIOM4951 Research Thesis A (4 UoC)	
	MATH1131 Mathematics 1A <u>OR</u> MATH1141 Higher Mathematics 1A	Term 3	ENGG1300 Engineering Mechanics		ANAT2511 Fundamentals of Anatomy		Discipline Elective		Biomedical Engineering Course	
	COMP1511 Programming Fundamentals		MTRN2500 Computing for Mechatronic Engineers		Biomedical Engineering Course		Biomedical Engineering Course		Biomedical Engineering Course	
Term 1	DESN1000 Engineering Design and Innovation	Term 1	ELEC2141 Digital Circuit Design	Term 1	MTRN3210 Feedback Control Systems	Term 1	MTRN3020 Modelling and Control of Mechatronic Systems	Term 1	BIOM4952 Research Thesis B (4 UoC)	
	ELEC1111 Electrical Circuit Fundamentals		MATH2019 Engineering Mathematics 2E <u>OR</u> MATH2018 Engineering Mathematics 2D		PHSL2121 Principles of Physiology A		MTRN4010 Advanced Autonomous Systems		BIOM9410 Regulatory Requirements of Biomedical Technology	
	MATH1231 Mathematics 1B <u>OR</u> MATH1241 Higher Mathematics 1B		MATH2089 Numerical Methods and Statistics						Biomedical Engineering Course	
Term 2	MMAN1130 Design and Manufacturing		MMAN2300 Engineering Mechanics 2	Term 2	MTRN3100 Robot Design	Term 2	MTRN4230 Robotics	Term 2	BIOM4953 Research Thesis C (4 UoC)	
	COMP2521 Data Structures and Algorithms	Term 2	ENGG2400 Mechanics of Solids 1 OR ENGG2500 Fluid Mechanics for Engineering		DESN3000 Strategic Design Innovation		Biomedical Engineering Course		BIOM9420 Clinical Laboratory Science	
					Discipline Elective		Biomedical Engineering Course		Recommended Discipline Elective	
NOTES	Compulsory Training Component: There is a program requirement of 60 days approved <u>Industrial Training</u> ENGG4999. This is intended as a guide only. Courses do not need to be studied in the exact structure that they appear here.									

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