Engineering

Bachelor of Engineering (Honours) / Computer Science (3785)

Mechanical and Manufacturing Engineering (MANFBH) / Computer Science (COMPA1)
T1 Entry 2024 Sample Plan

UNSW SYDNEY

	Year 1		Year 2		Year 3		Year 4		Year 5
Term 1	COMP1511 Programming Fundamentals	**Term 1**	COMP1521 Computer Systems Fundamentals	**Term 1**	MMAN3200 Linear Systems and Control	**Term 1**	COMP3121 Algorithm Design and Analysis OR COMP3821 Extended Algorithm Design and Analysis	**Term 1**	MMAN4951 Research Thesis A
	MATH1131 Mathematics 1A OR MATH1141 Higher Mathematics 1A		MATH2019 Engineering Mathematics 2E		MECH3110 Mechanical Design 1		MANF4430 Reliability and Maintenance Engineering		MANF4150 Design of Intelligent Manufacturing Systems
	PHYS1121 Physics 1A OR PHYS1131 Higher Physics 1A		ENGG2500 Fluid Mechanics for Engineers		COMP2521 Data Structures and Algorithms		MANF4100 Design and Analysis of Product-Process Systems		Computing Elective
Term 2	MATH1231 Mathematics 1B OR MATH1241 Higher Mathematics 1B	**Term 2**	ENGG2400 Mechanics of Solids 1	**Term 2**	DESN3000 Strategic Design Innovation	**Term 2**	MANF4611 Process Modelling and Simulation	**Term 2**	MMAN4952 Research Thesis B
	COMP1531 Software Engineering Fundamentals		MMAN1130 Design and Manufacturing		MANF3510 Process Technology and Automation		COMP3900 Computer Science Project		Computing Elective
									Disciplinary Elective
Term 3	DESN1000 Introduction to Engineering Design and Innovation	**Term 3**	DESN2000 Engineering Design and Professional Practice	**Term 3**	COMP2511 Object-Oriented Design and Programming	**Term 3**	MMAN4400 Engineering Management	**Term 3**	MMAN4953 Research Thesis C
	ELEC1111 Electrical Circuit Fundamentals		MATH2089 Numerical Methods and Statistics		MMAN2700 Thermodynamics		COMP4920 Professional Issues and Ethics in Information Technology		Computing Elective
	ENGG1300 Engineering Mechanics		MMAN2300 Engineering Mechanics 2		Disciplinary Elective		Computing Elective		Computing Elective

NOTES

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Information is correct as of 01.05.2024 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

	Year 1		Year 2		Year 3		Year 4		Year 5
Term 2	COMP1511 Programming Fundamentals	**Term 2**	COMP2521 Data Structures and Algorithms	**Term 2**	ENGG2400 Mechanics of Solids 1	**Term 2**	MMAN3200 Linear Systems and Control	**Term 2**	MMAN4951 Research Thesis A
	MMAN1130 Design and Manufacturing		ENGG1300 Engineering Mechanics		DESN3000 Strategic Design Innovation		MANF4611 Process Modelling and Simulation		**Computing Elective**
			COMP1521 Computer Systems Fundamentals		MANF3510 Process Technology and Automation		COMP3900 Computer Science Project		**Disciplinary Elective**
Term 3	MATH1131 Mathematics 1A OR MATH1141 Higher Mathematics 1A	**Term 3**	COMP2511 Object-Oriented Design and Programming	**Term 3**	MMAN2700 Thermodynamics	**Term 3**	MMAN4400 Engineering Management	**Term 3**	MMAN4952 Research Thesis B
	PHYS1121 Physics 1A OR PHYS1131 Higher Physics 1A		DESN2000 Engineering Design and Professional Practice		MMAN2300 Engineering Mechanics 2		COMP4920 Professional Issues and Ethics in Information Technology		**Computing Elective**
	COMP1531 Software Engineering Fundamentals		MATH2089 Numerical Methods and Statistics		**Computing Elective**				**Computing Elective**
Term 1	ELEC1111 Electrical Circuit Fundamentals	**Term 1**	MATH2019 Engineering Mathematics 2E	**Term 1**	MECH3110 Mechanical Design 1	**Term 1**	COMP3121 Algorithm Design and Analysis OR COMP3821 Extended Algorithm Design and Analysis	**Term 1**	MMAN4953 Research Thesis C
	DESN1000 Introduction to Engineering Design and Innovation		ENGG2500 Fluid Mechanics for Engineers		MANF4100 Design and Analysis of Product-Process Systems		MANF4150 Design of Intelligent Manufacturing Systems		**Computing Elective**
	MATH1231 Mathematics 1B OR MATH1241 Higher Mathematics 1B						MANF4430 Reliability and Maintenance Engineering		**Disciplinary Elective**

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Bachelor of Engineering (Honours) / Computer Science (3785)

Mechanical and Manufacturing Engineering (MANFBH) / Computer Science (COMPA1)
T3 Entry 2024 Sample Plan

	Year 1		Year 2		Year 3		Year 4		Year 5
Term 3	COMP1511 Programming Fundamentals	**Term 3**	DESN2000 Engineering Design and Professional Practice	**Term 3**	COMP3121 Algorithm Design and Analysis	**Term 3**	COMP3900 Computer Science Project	**Term 3**	MMAN4951 Research Thesis A
	MATH1131 Mathematics 1A OR MATH1141 Higher Mathematics 1A		ELEC1111 Electrical Circuit Fundamentals		MATH2089 Numerical Methods and Statistics		MMAN4400 Engineering Management		COMP4920 Professional Issues and Ethics in Information Technology
	PHYS1121 Physics 1A OR PHYS1131 Higher Physics 1A		MATH2018① Engineering Mathematics 2D		ENGG2500 Fluid Mechanics for Engineers		Computing Elective		Disciplinary Elective
Term 1	DESN1000 Introduction to Engineering Design and Innovation	**Term 1**	COMP1531 Software Engineering Fundamentals	**Term 1**	MMAN2700 Thermodynamics	**Term 1**	MANF4430 Reliability and Maintenance Engineering	**Term 1**	MMAN4952 Research Thesis B
	COMP1521 Computer Systems Fundamentals		COMP2521 Data Structures and Algorithms		MECH3110 Mechanical Design 1		MANF4100 Design and Analysis of Product-Process Systems		Computing Elective
					MMAN3200 Linear Systems and Control		MANF4150 Design of Intelligent Manufacturing Systems		Computing Elective
Term 2	ENGG1300 Engineering Mechanics	**Term 2**	COMP2511 Object-Oriented Design and Programming	**Term 2**	DESN3000 Strategic Design Innovation	**Term 2**	MANF4611 Process Modelling and Simulation	**Term 2**	MMAN4953 Research Thesis C
	MATH1231 Mathematics 1B OR MATH1241 Higher Mathematics 1B		ENGG2400 Mechanics of Solids 1		MANF3510 Process Technology and Automation		Computing Elective		Computing Elective
	MMAN1130 Design and Manufacturing		MMAN2300 Engineering Mechanics 2						Disciplinary Elective

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①Students can take MATH2018 or MATH2019 depending on term offerings and availability.