#### **Engineering**

#### Bachelor of Engineering (Honours) (3707)

### Mechanical & Manufacturing Engineering (MANFBH)

# T1 Entry 2024 Sample Plan



Year 1		Year 2		Year 3		Year 4	
Term 1	<b>DESN1000</b> Engineering Design and Innovation	Term 1	MATH2019 Engineering Mathematics 2E OR MATH2018 Engineering Mathematics 2D	Term 1	Discipline Elective Course	Term 1	MANF4150 Design of Intelligent Manufacturing Systems
	PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A		MATH2089 Numerical Methods and Statistics		MECH3110 Mechanical Design 1		MANF4430 Reliability and Maintenance Engineering
	MATH1131 Mathematics 1A <u>OR</u> MATH1141 Higher Mathematics 1A		<b>MMAN2700</b> Thermodynamics		MANF4100  Design and Analysis of Product-Process Systems		<b>MMAN4951</b> (4 UoC) Research Thesis A
Term 2	MATH1231 Mathematics 1B <u>OR</u> MATH1241 Higher Mathematics 1B	Term 2	MMAN2300 Engineering Mechanics 2	Term 2	MANF3510 Process Technology and Automation	Term 2	MANF4611 Process Modelling and Simulation
	MMAN1130 Design and Manufacturing		ENGG2400 Mechanics of Solids 1		<b>DESN3000</b> Strategic Design Innovation		General Education Course
	*Free Elective Course		Free Elective Course		MMAN3200 Linear Systems and Control		<b>MMAN4952</b> (4 UoC) Research Thesis B
Term 3	ENGG1300 Engineering Mechanics	Term 3	<b>DESN2000</b> Engineering Design and Professional Practice	Term 3	MMAN4400 Engineering Management	Term 3	Discipline Elective Course
	ENGG1811 Computing for Engineers <u>OR</u> COMP1511 Programming Fundamentals <u>OR</u> COMP1911 Computing 1A		ENGG2500 Fluid Mechanics for Engineers		General Education Course		<b>MMAN4953</b> (4 UoC) Research Thesis C
	ELEC1111 Electrical Circuit Fundamentals						

NOTES

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

\*MATS1110 is recommended Free Elective Course to be attempted during Year 1.

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

#### **Engineering**

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## T2 Entry 2024 Sample Plan



Year 1		Year 2		Year 3		Year 4	
Term 2	Free Elective Course	Term 2	MMAN1130 Design and Manufacturing	Term 2	<b>MANF3510</b> Process Technology and Automation	Term 2	MANF4611 Process Modelling and Simulation
	PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A		MMAN2300 Engineering Mechanics 2		<b>DESN3000</b> Strategic Design Innovation		General Education Course
	MATH1131 Mathematics 1A <u>OR</u> MATH1141 Higher Mathematics 1A		<b>ENGG2400</b> Mechanics of Solids 1		MMAN3200 Linear Systems and Control		<b>MMAN4951</b> (4 UoC) Research Thesis A
Term 3	ENGG1811 Computing for Engineers <u>OR</u> COMP1511 Programming Fundamentals <u>OR</u> COMP1911 Computing 1A	Term 3	<b>DESN2000</b> Engineering Design and Professional Practice	Term 3	MMAN4400 Engineering Management	Term 3	Discipline Elective Course
	MATH1231 Mathematics 1B <u>OR</u> MATH1241 Higher Mathematics 1B		ENGG2500 Fluid Mechanics for Engineers		MATH2089 Numerical Methods and Statistics		Discipline Elective Course
	ENGG1300 Engineering Mechanics				General Education Course		<b>MMAN4952</b> (4 UoC) Research Thesis B
Term 1	ELEC1111 Electrical Circuit Fundamentals	Term 1	<b>MMAN2700</b> Thermodynamics	Term 1	MANF4100 Design and Analysis of Prod1uct-Process Systems	Term 1	MANF4150 Design of Intelligent Manufacturing Systems
	MATH2019 Engineering Mathematics 2E <u>OR</u> MATH2018 Engineering Mathematics 2D		<b>MECH3110</b> Mechanical Design 1		MANF4430 Reliability and Maintenance Engineering		MMAN4953 (4 UoC) Research Thesis C
	<b>DESN1000</b> Engineering Design and Innovation		Free Elective Course				

NOTES

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

\*MATS1110 is recommended Free Elective Course to be attempted during Year 1.

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#### **Engineering**

#### Bachelor of Engineering (Honours) (3707)

### Mechanical & Manufacturing Engineering (MANFBH)

## T3 Entry 2024 Sample Plan



Year 1		Year 2		Year 3		Year 4	
Term 3	<b>DESN1000</b> Engineering Design and Innovation	Term 3	<b>DESN2000</b> Engineering Design and Professional Practice	Term 3	MMAN4400 Engineering Management	Term 3	Discipline Elective Course
	ELEC1111 Electrical Circuit Fundamentals		ENGG2500 Fluid Mechanics for Engineers		Discipline Elective Course		General Education Course
	ENGG1811 Computing for Engineers <u>OR</u> COMP1511 Programming Fundamentals <u>OR</u> COMP1911 Computing 1A		ENGG1300 Engineering Mechanics		General Education Course		<b>MMAN4951</b> (4 UoC) Research Thesis A
Term 1	MATH1131 Mathematics 1A <u>OR</u> MATH1141 Higher Mathematics 1A	Term 1	MATH2019 Engineering Mathematics 2E OR MATH2018 Engineering Mathematics 2D	Term 1	<b>MECH3110</b> Mechanical Design 1	Term 1	MANF4150 Design of Intelligent Manufacturing Systems
	PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A		MATH2089 Numerical Methods and Statistics		MANF4100 Design and Analysis of Product-Process Systems		MANF4430 Reliability and Maintenance Engineering
	Free Elective Course		<b>MMAN2700</b> Thermodynamics				<b>MMAN4952</b> (4 UoC) Research Thesis B
Term 2	MMAN1130 Design and Manufacturing	Term 2	MMAN2300 Engineering Mechanics 2	Term 2	MANF3510 Process Technology and Automation	Term 2	MANF4611 Process Modelling and Simulation
	MATH1231 Mathematics 1B <u>OR</u> MATH1241 Higher Mathematics 1B		ENGG2400 Mechanics of Solids 1		<b>DESN3000</b> Strategic Design Innovation		<b>MMAN4953</b> (4 UoC) Research Thesis C
	*Free Elective Course				MMAN3200 Linear Systems and Control		

NOTES

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

\*MATS1110 is recommended Free Elective Course to be attempted during Year 1.

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