Engineering

Engineering (Honours) / Biomedical Engineering (3768)

Bioinformatics Engineering (BINFAH)

T1 Entry 2025 Sample Plan

Year 1	
Term 1	**PHYS1111** Fundamentals of Physics OR **PHYS1121** Physics 1A OR **PHYS1131** Higher Physics 1A
	DESN1000 Engineering Design and Innovation
	MATH1131 Mathematics 1A OR **MATH1141** Higher Mathematics 1A
Term 2	**MATH1231** Mathematics 1B OR **MATH1241** Higher Mathematics 1B
	COMP1511 Programming Fundamentals
	MATH1081 Discrete Mathematics
Term 3	**COMP1521** Computer Systems Fundamentals
	BABS1201 Molecules, Cells and Genes

Year 2	
Term 1	**COMP1531** Software Engineering Fundamentals
	COMP2521 Data Structures and Algorithms
	CHEM1011 Chemistry 1A OR **CHEM1031** (Higher) Chemistry 1A
Term 2	**DESN2000** Engineering Design & Professional Practice
	COMP2041 Software Construction: Techniques and Tools
	COMP2511 Object-Oriented Design and Programming
Term 3	**BINF2010** Introduction to Bioinformatics
	BIOC2201 Principles of Molecular Biology (Advanced)

Year 3	
Term 1	**COMP3121** Algorithms and Programming Techniques
	BABS3121 Molecular Biology of Nucleic Acids
	PHSL2121 Principles of Physiology A
Term 2	**MATH2801** Theory of Statistics OR **MATH2901** Higher Theory of Statistics
	BINF3010 Applied Bioinformatics
	BABS2202 Molecular Cell Biology 1 OR **BIOC2101** Principles of Biochemistry (Advanced)
Term 3	**BINF3020** Computational Bioinformatics
	Free Elective

Year 4	
Term 1	**COMP3311** Database Systems
	Discipline Elective
Term 2	**Biomedical Engineering Course**
	Biomedical Engineering Course
	Biomedical Engineering Course
Term 3	**COMP4920** Professional Issues and Ethics in Information Technology
	Biomedical Engineering Course
	Biomedical Engineering Course

Year 5	
Term 1	**BIOM4951** Research Thesis A (4 UoC)
	BIOM9410 Regulatory Requirements of Biomedical Technology
	Biomedical Engineering Course
Term 2	**BIOM4952** Research Thesis B (4 UoC)
	BIOM9420 Clinical Laboratory Science
	Biomedical Engineering Course
Term 3	**BIOM4953** Research Thesis C (4 UoC)
	Discipline Elective
	***Additional Elective**

NOTES	
	Compulsory Training Component: There is a program requirement of 60 days approved Industrial Training ENGG4999. *BIOM1010 Engineering in Medicine and Biology is a recommended first year elective **This is intended as a guide only. Courses do not need to be studied in the exact structure that they appear here.**

Year 1	
Term 3	**COMP1511** Programming Fundamentals
	DESN1000 Engineering Design and Innovation
	BABS1201 Molecules, Cells and Genes
Term 1	**MATH1131** Mathematics 1A OR **MATH1141** Higher Mathematics 1A
	COMP1531 Software Engineering Fundamentals
	PHYS1111 Fundamentals of Physics OR **PHYS1121** Physics 1A OR **PHYS1131** Higher Physics 1A
Term 2	**MATH1231** Mathematics 1B OR **MATH1241** Higher Mathematics 1B
	COMP1521