Engineering

Bachelor of Engineering (Honours) (3707)

Bioinformatics Engineering (BINFAH)

T1 Entry 2024 Sample Plan



Year 1		Year 2		Year 3		Year 4	
Term 1	BABS1201 Molecules, Cells and Genes	Term 1	COMP1531 Software Engineering Fundamentals	Term 1	COMP3121 Algorithms and Programming Techniques	Term 1	COMP4951 Research Thesis A (4 UoC)
	DESN1000 Engineering Design and Innovation		COMP2521 Data Structures and Algorithms		BABS3121 Molecular Biology of Nucleic Acids		COMP3311 Database Systems
	MATH1131 Mathematics 1A <u>OR</u> MATH1141 Higher Mathematics 1A		CHEM1011 Chemistry 1A <u>OR</u> CHEM1031 (Higher) Chemistry 1A		Free Elective Course		General Education Course
Term 2	MATH1231 Mathematics 1B <u>OR</u> MATH1241 Higher Mathematics 1B	Term 2	DESN2000 Engineering Design & Professional Practice	Term 2	MATH2801 Theory of Statistics <u>OR</u> MATH2901 Higher Theory of Statistics	Term 2	COMP4952 Research Thesis B (4 UoC)
	COMP1511 Programming Fundamentals		COMP2041 Software Construction: Techniques and Tools		BINF3010 Applied Bioinformatics		Discipline Elective Course
	MATH1081 Discrete Mathematics		COMP2511 Object-Oriented Design and Programming		BABS2202 Molecular Cell Biology 1 <u>OR</u> BIOC2101 Principles of Biochemistry (Advanced)		Free Elective Course
Term 3	COMP1521 Computer Systems Fundamentals	Term 3	BINF2010 Introduction to Bioinformatics	Term 3	BINF3020 Computational Bioinformatics	Term 3	COMP4953 Research Thesis C (4 UoC)
	PHYS1111 Fundamentals of Physics <u>OR</u> PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A		BIOC2201 Principles of Molecular Biology (Advanced)		Discipline Elective Course		COMP4920 Professional Issues and Ethics in Information Technology
							General Education Course

NOTES

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

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

Engineering

Bachelor of Engineering (Honours) (3707)

Bioinformatics Engineering (BINFAH)

T2 Entry 2024 Sample Plan



Year 1		Year 2		Year 3		Year 4	
Term 2	COMP1511 Programming Fundamentals	Term 2	CHEM1011 Chemistry 1A	Term 2	DESN2000 Engineering Design & Professional Practice	Term 2	COMP4951 Research Thesis A (4 UoC)
	MATH1131 Mathematics 1A		COMP2041 Software Construction: Techniques & Tools		MATH2801 Theory of Statistics <u>OR</u> MATH2901 Higher Theory of Statistics		Free Elective Course
			COMP1521 Computer Systems Fundamentals		BINF3010 Applied Bioinformatics		Discipline Elective Course
	BABS1201 Molecules, Cells and Genes	Term 3	PHYS1111 Fundamentals of Physics <u>OR</u> PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A	Term 3	BABS2202 Molecular Cell Biology 1 <u>OR</u> BIOC2101 Principles of Biochemistry (Advanced)	Term 3	COMP4952 Research Thesis B (4 UoC)
Term 3	MATH1231 Mathematics 1B		BINF2010 Introduction to Bioinformatics		BINF3020 Computational Bioinformatics		General Education Course
	DESN1000 Engineering Design and Innovation		BIOC2201 Principles of Molecular Biology (Advanced)		Discipline Elective Course		COMP4920 Professional Issues and Ethics in Information Technology
	COMP2521 Data Structures and Algorithms	Term 1	COMP2511 Object-Oriented Design and Programming	Term 1	BABS3121 Molecular Biology of Nucleic Acids	Term 1	COMP4953 Research Thesis C (4 UoC)
Term 1	MATH1081 Discrete Mathematics		COMP3121 Algorithms and Programming Techniques		COMP3311 Database Systems		General Education Course
	COMP1531 Software Engineering Fundamentals						Free Elective Course

NOTES

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Engineering

Bachelor of Engineering (Honours) (3707)

Bioinformatics Engineering (BINFAH)

T3 Entry 2024 Sample Plan



Year 1		Year 2		Year 3		Year 4	
Term 3	COMP1511 Programming Fundamentals	Term 3	BIOC2201 Principles of Molecular Biology (Advanced)	Term 3	COMP2511 Object-Oriented Design and Programming	Term 3	COMP4951 Research Thesis A (4 UoC)
	DESN1000 Engineering Design and Innovation		MATH1081 Discrete Mathematics		BINF3020 Computational Bioinformatics		Discipline Elective Course
	BABS1201 Molecules, Cells and Genes		BINF2010 Introduction to Bioinformatics		BABS2204 <u>OR</u> BABS2264		COMP4920 Professional Issues and Ethics in Information Technology
	MATH1131 Mathematics 1A <u>OR</u> MATH1141 Higher Mathematics 1A	Term 1	PHYS1111 Fundamentals of Physics <u>OR</u> PHYS1121 Physics 1A <u>OR</u> PHYS1131 Higher Physics 1A	Term 1	BABS3121 Molecular Biology of Nucleic Acids	Term 1	COMP4952 Research Thesis B (4 UoC)
Term 1	COMP1531 Software Engineering Fundamentals		COMP2521 Data Structures and Algorithms		COMP3311 Database Systems		General Education Course
	CHEM1011 Chemistry 1A <u>OR</u> CHEM1031 Higher Chemistry 1A				Free Elective Course		Discipline Elective Course
	MATH1231 Mathematics 1B <u>OR</u> MATH1241 Higher Mathematics 1B	Term 2	COMP2041 Software Construction: Techniques and Tools	Term 2	COMP3121 Algorithms and Programming Techniques	Term 2	COMP4953 Research Thesis C (4 UoC)
Term 2	COMP1521 Computer Systems Fundamentals		DESN2000 Engineering Design & Professional Practice		MATH2801 Theory of Statistics <u>OR</u> MATH2901 Higher Theory of Statistics		General Education Course
			BINF3010 Applied Bioinformatics				Free Elective Course

NOTES

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

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