Bachelor of Science (Honours) (Nanotechnology) 2022 Study Planner

Flinders UNIVERSITY
College of Science & Engineering

Semester 1 Start: Biomedical Nanotechnology Stream

First Level	Semester 1	**BIOL1102** Molecular Basis of Life	**CHEM1101** Chemical Structure and Bonding	**MATH1121** Mathematics 1A **OR** **MATH1701** Mathematics Fundamentals A **MUST CHOOSE A PAIR**	**STEM1001** Nature of STEM
	Semester 2	**CHEM1102** Modern Chemistry	**MATH1122** Mathematics 1B **OR** **MATH1702** Mathematics Fundamentals B **MUST CHOOSE A PAIR**	**Elective Topic**	**Elective Topic**
Second Level	Semester 1	**BIOL2771** Biochemistry	**CHEM2701** Chemical Reactivity	**CHEM2711** Spectroscopy and Data Analysis	**Elective Topic**
	Semester 2	**BIOL2772** Molecular Biology	**CHEM2702** Organic Reactions	**NANO2701** Structure and Characterisation	**Elective Topic**
Third Level	Semester 1	**BIOL3771** DNA to Genome	**CHEM3701** Applied Spectroscopy and Electrochemistry	**Elective Topic**	**Elective Topic**
	Semester 2	**BIOL3762** Protein to Proteome	**CHEM2712** Analytical Separations	**CHEM3712** Introduction to Polymer Science	**NANO3702** Frontiers of Nanotechnology
Fourth Level	Semester 1	**STEM7001** Honours Research Methods	**CPES7711** Advanced Techniques in Chemical and Physical Science	**CPES7721** Advanced Chemical and Physical Science	**STEM7000A** Honours Research Project in STEM
	Semester 2	**STEM7000B** Honours Research Project in STEM	**STEM7000C** Honours Research Project in STEM	**STEM7000D** Honours Research Project in STEM	**STEM7000E** Honours Research Project in STEM

This guide is correct at time of publishing but is subject to change November 2021

Semester 2 Start: Biomedical Nanotechnology Stream

First Level	**Semester 2**	**CHEM1101** Chemical Structure and Bonding	**CHEM1102** Modern Chemistry	**MATH1121** Mathematics 1A **OR** **MATH1701** Mathematics Fundamentals A **MUST CHOOSE A PAIR**	**Elective Topic**
	Semester 1	**BIOL1102** Molecular Basis of Life	**STEM1001** Nature of STEM	**MATH1122** Mathematics 1B **OR** **MATH1702** Mathematics Fundamentals B **MUST CHOOSE A PAIR**	**Elective Topic**
Second Level	**Semester 2**	**BIOL2772** Molecular Biology	**CHEM2702** Organic Reactions	**NANO2701** Structure and Characterisation	**Elective Topic**
	Semester 1	**BIOL2771** Biochemistry	**CHEM2701** Chemical Reactivity	**CHEM2711** Spectroscopy and Data Analysis	**Elective Topic**
Third Level	**Semester 2**	**BIOL3762** Protein to Proteome	**CHEM2712** Analytical Separations	**CHEM3712** Introduction to Polymer Science	**NANO3702** Frontiers of Nanotechnology
	Semester 1	**BIOL3771** DNA to Genome	**CHEM3701** Applied Spectroscopy and Electrochemistry	**Elective Topic**	**Elective Topic**
Fourth Level	**Semester 2**	**STEM7001** Honours Research Methods	**STEM7000A** Honours Research Project in STEM	**STEM7000B** Honours Research Project in STEM	**STEM7000C** Honours Research Project in STEM
	Semester 1	**CPES7711** Advanced Techniques in Chemical and Physical Science	**CPES7721** Advanced Chemical and Physical Science	**STEM7000D** Honours Research Project in STEM	**STEM7000E** Honours Research Project in STEM

Semester 1 Start: Quantum Nanostructures Stream

First Level	Semester 1	**CHEM1101** Chemical Structure and Bonding	**MATH1121** Mathematics 1A	**PHYS1101** Fundamental Physics I	**STEM1001** Nature of STEM
	Semester 2	**CHEM1102** Modern Chemistry	**MATH1122** Mathematics 1B	**PHYS1102** Fundamental Physics II	**Elective Topic**
Second Level	Semester 1	**CHEM2701** Chemical Reactivity	**CHEM2711** Spectroscopy and Data Analysis	**MATH2702** Linear Algebra and Differential Equations	**PHYS2701** Quantum Concepts
	Semester 2	**CHEM2702** Organic Reactions	**NANO2701** Structure and Characterisation	**Elective Topic**	**Elective Topic**
Third Level	Semester 1	**CHEM3701** Applied Spectroscopy and Electrochemistry	**MATH3702** Methods of Applied Mathematics	**PHYS3711** Quantum Physics	**Elective Topic**
	Semester 2	**CHEM2712** Analytical Separations	**CHEM3712** Introduction to Polymer Science	**NANO3702** Frontiers of Nanotechnology	**Elective Topic**
Fourth Level	Semester 1	**STEM7001** Honours Research Methods	**CPES7711** Advanced Techniques in Chemical and Physical Science	**CPES7721** Advanced Chemical and Physical Science	**STEM7000A** Honours Research Project in STEM
	Semester 2	**STEM7000B** Honours Research Project in STEM	**STEM7000C** Honours Research Project in STEM	**STEM7000D** Honours Research Project in STEM	**STEM7000E** Honours Research Project in STEM

Semester 2 Start: Biomedical Nanotechnology Stream

First Level	Semester 2	**CHEM1101** Chemical Structure and Bonding	**CHEM1102** Modern Chemistry	**MATH1121** Mathematics 1A	**Elective Topic**
	Semester 1	**PHYS1101** Fundamental Physics I	**STEM1001** Nature of STEM	**MATH1122** Mathematics 1B	**Elective Topic**
Second Level	Semester 2	**PHYS1102** Fundamental Physics II	**CHEM2702** Organic Reactions	**NANO2701** Structure and Characterisation	**Elective Topic**
	Semester 1	**CHEM2701** Chemical Reactivity	**CHEM2711** Spectroscopy and Data Analysis	**MATH2702** Linear Algebra and Differential Equations	**PHYS2701** Quantum Concepts
Third Level	Semester 2	**CHEM2712** Analytical Separations	**CHEM3712** Introduction to Polymer Science	**NANO3702** Frontiers of Nanotechnology	**Elective Topic**
	Semester 1	**CHEM3701** Applied Spectroscopy and Electrochemistry	**MATH3702** Methods of Applied Mathematics	**PHYS3711** Quantum Physics	**Elective Topic**
Fourth Level	Semester 2	**STEM7001** Honours Research Methods	**STEM7000A** Honours Research Project in STEM	**STEM7000B** Honours Research Project in STEM	**STEM7000C** Honours Research Project in STEM
	Semester 1	**CPES7711** Advanced Techniques in Chemical and Physical Science	**CPES7721** Advanced Chemical and Physical Science	**STEM7000D** Honours Research Project in STEM	**STEM7000E** Honours Research Project in STEM

Key:

Core Topics	Compulsory topic
Option Topics	A choice from a list of specified topics (please refer to course rule)
Elective	Any topic offered by the University at the appropriate year level, provided entry and course requirements are met and that no more than 45 units of First Year topics are included in the 108-unit program.

Please note:

- This document is provided as a guide only. Students are responsible for ensuring that they have completed their study according to the official Course Rule.
- Topic information for all topics, including pre-requisites can be found on the Topic Page
- General enrolment assistance is available via Ask Flinders
- For specific course advice e-mail: courseadvice.SE@flinders.edu.au

This guide is correct at time of publishing but is subject to change November 2021