

## Study Plan Template – no intake for 2021

### Bachelor of Science (Honours) (Nanotechnology)

Please note that this document is provided as a guide only. Students are responsible for ensuring that they have completed 144 units of study according to the official Bachelor of Science (Honours) (Nanotechnology) course rule available at <https://students.flinders.edu.au/my-course/course-rules/undergrad/bscs/bschs-nano>

Students are responsible for planning their Core, Option and Elective topics ahead to ensure they meet the topic prerequisites.

A list of all topics, including topic prerequisite information and alternate study period availabilities, is available at [2021 Topics](#).

#### Semester 1 start: Biomedical Nanotechnology Stream

Year 1	S1	<b>BIOL1102</b> Molecular Basis of Life	<b>CHEM1101</b> Chemical Structure and Bonding	<b>MATH1121</b> Mathematics 1A <b>OR</b> <b>MATH1701</b> Mathematics Fundamentals A <b>MUST CHOOSE A PAIR</b>	<b>STEM1001</b> Nature of STEM
	S2	<b>NANO1101</b> Fundamentals of Nanotechnology	<b>CHEM1102</b> Modern Chemistry	<b>MATH1122</b> Mathematics 1B <b>OR</b> <b>MATH1702</b> Mathematics Fundamentals B <b>MUST CHOOSE A PAIR</b>	^ Elective Topic
Year 2	S1	<b>BIOL2771</b> Biochemistry	<b>CHEM2701</b> Chemical Reactivity	<b>CHEM2711</b> Spectroscopy and Data Analysis	^ Elective Topic
	S2	<b>BIOL2772</b> Molecular Biology	<b>CHEM2702</b> Organic Reactions	<b>NANO2701</b> Structure and Characterisation	^ Elective Topic
Year 3	S1	<b>BIOL3771</b> DNA to Genome	<b>CHEM3701</b> Applied Spectroscopy and Electrochemistry	^ Elective Topic	^ Elective Topic
	S2	<b>BIOL3762</b> Protein to Proteome	<b>CHEM2712</b> Analytical Separations	<b>CHEM3712</b> Introduction to Polymer Science	<b>NANO3702</b> Frontiers of Nanotechnology
Year 4	S1	<b>STEM7001</b> Honours Research Methods	<b>CPES7711</b> Advanced Techniques in Chemical and Physical Science	<b>CPES7721</b> Advanced Chemical and Physical Science	<b>STEM7000A</b> Honours Research Project in STEM
	S2	<b>STEM7000B</b> Honours Research Project in STEM	<b>STEM7000C</b> Honours Research Project in STEM	<b>STEM7000D</b> Honours Research Project in STEM	<b>STEM7000E</b> Honours Research Project in STEM

## Semester 2 start: Biomedical Nanotechnology Stream

Year 1	S2	<b>CHEM1101</b> Chemical Structure and Bonding	<b>CHEM1102</b> Modern Chemistry	<b>MATH1121</b> Mathematics 1A <b>OR</b> <b>MATH1701</b> Mathematics Fundamentals A <b>MUST CHOOSE A PAIR</b>	<b>NANO1101</b> Fundamentals of Nanotechnology
	S1	<b>BIOL1102</b> Molecular Basis of Life	<b>STEM1001</b> Nature of STEM	<b>MATH1122</b> Mathematics 1B <b>OR</b> <b>MATH1702</b> Mathematics Fundamentals B <b>MUST CHOOSE A PAIR</b>	^ Elective Topic
Year 2	S2	<b>BIOL2772</b> Molecular Biology	<b>CHEM2702</b> Organic Reactions	<b>NANO2701</b> Structure and Characterisation	^ Elective Topic
	S1	<b>BIOL2771</b> Biochemistry	<b>CHEM2701</b> Chemical Reactivity	<b>CHEM2711</b> Spectroscopy and Data Analysis	^ Elective Topic
Year 3	S2	<b>BIOL3762</b> Protein to Proteome	<b>CHEM2712</b> Analytical Separations	<b>CHEM3712</b> Introduction to Polymer Science	<b>NANO3702</b> Frontiers of Nanotechnology
	S1	<b>BIOL3771</b> DNA to Genome	<b>CHEM3701</b> Applied Spectroscopy and Electrochemistry	^ Elective Topic	^ Elective Topic
Year 4	S2	<b>STEM7001</b> Honours Research Methods	<b>STEM7000A</b> Honours Research Project in STEM	<b>STEM7000B</b> Honours Research Project in STEM	<b>STEM7000C</b> Honours Research Project in STEM
	S1	<b>CPES7711</b> Advanced Techniques in Chemical and Physical Science	<b>CPES7721</b> Advanced Chemical and Physical Science	<b>STEM7000D</b> Honours Research Project in STEM	<b>STEM7000E</b> Honours Research Project in STEM

Key:	
Core Topic	Compulsory topic
Option Topic	A choice from a list of specified topics
^ Elective Topic	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 refer to the course rule for a list of recommended electives. Students are encouraged to enroll in <b>STEM3001 Science Connect</b> as a third-year elective

**Semester 1 start: Quantum Nanostructures Stream**

Year 1	S1	<b>CHEM1101</b> Chemical Structure and Bonding	<b>MATH1121</b> Mathematics 1A	<b>PHYS1101</b> Fundamental Physics I	<b>STEM1001_</b> Nature of STEM
	S2	<b>CHEM1102</b> Modern Chemistry	<b>MATH1122</b> Mathematics 1B	<b>PHYS1102</b> Fundamental Physics II	<b>NANO1101</b> Fundamentals of Nanotechnology
Year 2	S1	<b>CHEM2701</b> Chemical Reactivity	<b>CHEM2711</b> Spectroscopy and Data Analysis	<b>MATH2702</b> Linear Algebra and Differential Equations	<b>PHYS2701</b> Quantum Concepts
	S2	<b>CHEM2702</b> Organic Reactions	<b>NANO2701</b> Structure and Characterisation	<b>^ Elective Topic</b>	<b>^ Elective Topic</b>
Year 3	S1	<b>CHEM3701</b> Applied Spectroscopy and Electrochemistry	<b>MATH3702</b> Methods of Applied Mathematics	<b>PHYS3711</b> Quantum Physics	<b>^ Elective Topic</b>
	S2	<b>CHEM2712</b> Analytical Separations	<b>CHEM3712</b> Introduction to Polymer Science	<b>NANO3702</b> Frontiers of Nanotechnology	<b>^ Elective Topic</b>
Year 4	S1	<b>STEM7001</b> Honours Research Methods	<b>CPES7711</b> Advanced Techniques in Chemical and Physical Science	<b>CPES7721</b> Advanced Chemical and Physical Science	<b>STEM7000A</b> Honours Research Project in STEM
	S2	<b>STEM7000B</b> Honours Research Project in STEM	<b>STEM7000C</b> Honours Research Project in STEM	<b>STEM7000D</b> Honours Research Project in STEM	<b>STEM7000E</b> Honours Research Project in STEM

## Semester 2 start: Quantum Nanostructures Stream

Year 1	S2	<b>CHEM1101</b> Chemical Structure and Bonding	<b>CHEM1102</b> Modern Chemistry	<b>MATH1121</b> Mathematics 1A	<b>NANO1101</b> Fundamentals of Nanotechnology
	S1	<b>PHYS1101</b> Fundamental Physics I	<b>STEM1001</b> Nature of STEM	<b>MATH1122</b> Mathematics 1B	<b>^ Elective Topic</b>
Year 2	S2	<b>PHYS1102</b> Fundamental Physics II	<b>CHEM2702</b> Organic Reactions	<b>NANO2701</b> Structure and Characterisation	<b>^ Elective Topic</b>
	S1	<b>CHEM2701</b> Chemical Reactivity	<b>CHEM2711</b> Spectroscopy and Data Analysis	<b>MATH2702</b> Linear Algebra and Differential Equations	<b>PHYS2701</b> Quantum Concepts
Year 3	S2	<b>CHEM2712</b> Analytical Separations	<b>CHEM3712</b> Introduction to Polymer Science	<b>NANO3702</b> Frontiers of Nanotechnology	<b>^ Elective Topic</b>
	S1	<b>CHEM3701</b> Applied Spectroscopy and Electrochemistry	<b>MATH3702</b> Methods of Applied Mathematics	<b>PHYS3711</b> Quantum Physics	<b>^ Elective Topic</b>
Year 4	S2	<b>STEM7001</b> Honours Research Methods	<b>STEM7000A</b> Honours Research Project in STEM	<b>STEM7000B</b> Honours Research Project in STEM	<b>STEM7000C</b> Honours Research Project in STEM
	S1	<b>CPES7711</b> Advanced Techniques in Chemical and Physical Science	<b>CPES7721</b> Advanced Chemical and Physical Science	<b>STEM7000D</b> Honours Research Project in STEM	<b>STEM7000E</b> Honours Research Project in STEM

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