

**Combined Bachelor of Medical Science and
Bachelor of Engineering (Biomedical) (Honours)
2024 Study Planner**



Semester 1 Start:

First Level	Semester 1	MATH1121 Mathematics 1A	BIOL1102 Molecular Basis of Life	CHEM1010* Chemistry 1A	MMED1005 (HPNA) How Your Body Works
	Semester 2	ENGR1401 Professional Skills	MATH1122 Mathematics 1B	MMED1007 Histology: The Building Blocks of the Human Body	MMED1008 How Your Cells Work
Second Level	Semester 1	ENGR1721 Engineering Programming	ENGR2711 Engineering Mathematics	PHYS1101 Fundamental Physics 1A	MDSC1102 Skills for Medical Scientists 1
	Semester 2	ENGR1201 Electronics	ENGR1722 Engineering Materials and Systems	ENGR2722 Analysis of Engineering Systems	ENGR2732 Biomechanics
Third Level	Semester 1	ENGR1711 Engineering Design	Electronic/Mechanical Option topic ENGR2731/2741	BIOL2771 Biochemistry	MMED2931 Human Physiology
	Semester 2	ENGR2772 Sensors and Actuators	BIOL2772 Molecular Biology	MDSC2000 (HPNA/required) Skills for Medical Scientists 2	MMED2932 (HPNA) Integrative Human Physiology
Fourth Level	Semester 1	ENGR3711 Control Systems	ENGR3741 Physiological Measurement	Electronic/Mechanical Option topic ENGR2721/3751	MME2933 (HPNA) Fundamental Neuroscience
	Semester 2	COMP2711 Computer Programming 2	ENGR2742 Biomedical Instrumentation	ENGR9742 Systems Engineering	Biomedical Engineering Honours Option Topic

Fifth level	NS1	ENGR3750 Workplace Preparation (0 unit)			
	Semester 1	ENGR7781 Innovation in Medical Devices	MDSC3000 Skills for Medical Scientists 3	MMED3930 (HPNA) Sensory Motor Systems	MMED3932 (HPNA) Body Systems
	Semester 2	ENGR3700 Engineering Practicum Or ENGR3710 International Engineering Practicum		ENGR9704 Engineering Management (NS2) (Must study NS2 intensive version)	
Sixth Level	Semester 1	STEM7003 Research Methods for Engineering and ICT Honours	STEM7004A Honours Research Project (4.5/13.5 units)	Biomedical Engineering Honours Option Topic	MMED3937 (HPNA) Pathophysiology for Medical Science
	Semester 2	STEM7004B Honours Research Project (4.5/13.5 units)	STEM7004C Honours Research Project (4.5/13.5 units)	MMED3931 (HPNA) Advanced Neuroscience	MMED3941 (HPNA) Human Musculoskeletal Anatomy

Semester 2 Start:

First Level	Semester 2	ENGR1401 Professional Skills	MATH1121 Mathematics 1A	MMED1005 How Your Body Works S1 or S2	MMED1007 Histology: The Building Blocks of the Human Body S2 <i>MDSC1102, BIOL1102 or ^MMED1005</i>
	Semester 1	MATH1122 Mathematics 1B	PHYS1101 Fundamental Physics 1A	BIOL1102 Molecular Basis of Life S1	CHEM1010* Chemistry 1A S1 or S2
Second Level	Semester 2	ENGR1201 Electronics	ENGR1722 Engineering Materials and Systems	ENGR2722 Analysis of Engineering Systems	ENGR2732 Biomechanics
	Semester 1	ENGR1721 Engineering Programming	ENGR2711 Engineering Mathematics	MDSC1102 Skills for Medical Scientists 1 S1	MMED2931 Human Physiology S1 <i>36 units completed & *assumed knowledge</i>

Third Level	Semester 2	ENGR2772 Sensors and Actuators	BIOL2772 Molecular Biology S2 <i>BIOL1102 & CHEM1010</i>	MMED1008 How Your Cells Work: Fundamentals of Cell Biology S2 <i>BIOL1102</i>	MDSC2000 (HPNA/required) Skills for Medical Scientists 2 S2 <i>18 units completed & *assumed knowledge</i>
	Semester 1	COMP2711 Computer Programming 2 S1 or S2, NS2 or SU	ENGR1711 Engineering Design	Electronic/Mechanical Option topic ENGR2731/2741	BIOL2771 Biochemistry S1 <i>BIOL1102 & CHEM1010</i>
Fourth Level	Semester 2	ENGR2742 Biomedical Instrumentation	Biomedical Engineering Honours Option Topic	MMED2932 (HPNA) Integrative Human Physiology S2 <i>MMED2931</i>	ENGR9742 Systems Engineering
	Semester 1	ENGR3711 Control Systems	ENGR3741 Physiological Measurement	Electronic/Mechanical Option topic ENGR2721/3751	MMED2933 (IHPNA) Fundamental Neuroscience S1 <i>*assumed knowledge</i>
Fifth level	NS1	ENGR3750 Workplace Preparation (0 units)			
	Semester 2	ENGR3700 Engineering Practicum Or ENGR3710 International Engineering Practicum		ENGR9704 Engineering Management (NS2) (Must study NS2 intensive version)	
	Semester 1	ENGR7781 Innovation in Medical Devices	MDSC3000 Skills for Medical Scientists 3 S1 <i>MDSC1102 and MDSC2000</i>	MMED3932 (HPNA) Body Systems S1 <i>MMED2931</i>	MMED3930 (HPNA) Sensory Motor Systems S1 <i>MMED2933</i>

Sixth Level	Semester 2	STEM7003 Research Methods for Engineering and ICT Honours	STEM7004A Honours Research Project (4.5/13.5 units)	MMED3941 (HPNA) Human Musculoskeletal Anatomy S2 <i>MMED3932 and MMED2931</i>	MMED3931 (HPNA) Advanced Neuroscience S2 <i>MMED2933 & ^MMED3930</i>
	Semester 1	STEM7004B Honours Research Project (4.5/13.5 units)	STEM7004C Honours Research Project (4.5/13.5 units)	Biomedical Engineering Honours Option Topic	MMED3937 (HPNA) Pathophysiology for Medical Science S1 <i>^MMED2931 or ^MMED2932</i>

Key:

Core Topics	Compulsory topic BENG BHI
Core Topics	Compulsory topic BMS
Option Topics	A choice from a list of specified topics (please refer to course rule)

*CHEM1010 - Students without Year 12 chemistry or equivalent are encouraged to submit and Ask Flinders request two weeks prior to Semester starting to be assessed for a course rule variation allowing for CHEM1201 General Chemistry to be added to the Study Plan in the place of CHEM1010.

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