SAMPLE BE(Hons) Mechanical Engineering (Biomedical Engineering) and BSc (Medicinal Chemistry) Conjoint Template – 2026

1st Year Conjoint

S1	COSC131 Introduction to Programming for Engineers	EMTH118 Engineering Mathematics 1A	PHYS101 Engineering Physics A	BIOL111 Cellular Biology and Biochemistry	
S2	ENGR102 Engineering Mechanics	EMTH119 Engineering Mathematics 1B	ENGR101 Foundations of Engineering	CHEM111 Chemical Principles and Processes	CHEM112 Structure and Reactivity in Chemistry and Biochemistry

ENGR100 Academic Writing Assessment

2nd Year Conjoint

S1	EMTH210 Engineering Mathematics 2	ENME202 Stress, Strain and Deformation in Machine Elements	CHEM211 Molecules	CHEM212 Chemical Reactivity	CHEM281 Practical Chemistry
S2	EMTH271 Mathematical Modelling and Computation 2	ENME203 Dynamics and Vibrations	CHEM242 Organic Chemistry	CHEM246 Introduction to Medicinal Chemistry	BIOL116 Human Biology

ENME199 Workshop Training Course for Mechanical and Mechatronics Engineering

ENGR200 Engineering Work Experience

3rd Year Conjoint

S1	ENME207 Materials Science and Engineering	ENME201 Design Communication	CHEM381 Advanced Synthetic Techniques	CHEM342 Aromatic, heterocyclic, and pharmaceutical chemistry	CHEM346 Contemporary Medicinal Chemistry
S2	ENME215 Engineering Thermodynamics	ENME221 Engineering Design and Manufacture	CHEM347 Drug Discovery and Development	CHEM382 Energy, Environmental and Materials Chemistry Lab	

ENGR200 Engineering Work Experience

4th Year Conjoint

S1	ENME301 Engineering Design and Production Management	ENME303 Controls and Vibrations	ENME314 Fluid Mechanics	ENME313 Electro Technology for Mechanical Engineers	SCIE101 Science, Society and Me
S2	ENME351 Biomedical Engineering Design	ENME302 Computational and Applied Mechanical Analysis	ENME315 Heat Transfer		100-level or above BSc elective (e.g. BIOL213 Microbiology)

ENGR200 Engineering Work Experience

5th Year Conjoint

S1	ENME408 Honours Research and Development Project (FYP)	ENME401 Mechanical Systems Design	400-level Biomedical Engineering elective	200-level or above BSc elective (e.g. CHEM338 Chemical Biology and Protein Chemistry)
S2		ENME418 Engineering Management and Professional Practice for Mechanical Engineers	400-level Biomedical Engineering elective	200-level or above BSc elective (e.g. BIOL313 Advanced Microbiology)

ENGR200 Engineering Work Experience

Disclaimer: This is a sample study plan, which is subject to vary year to year depending on programme changes and course offerings. Please refer any queries regarding this study plans to the Faculty of Engineering student advisors at engdegreeadvice@canterbury.ac.nz or phone 03 369 1717.
ENME307 has been removed from the Mechanical program to allow enough points with the elective.
Minors: Require all specified Mechanical Engineering course requirements plus an ENME408 FYP in chosen minor and the following:
From 2022 Aerospace Minor: ENME362 (replaces ENME311) and two (2) of: ENGR401, ENME404, ENME460 and any applicable Special Topics.
From 2019 Biomedical Minor: ENME351 (replaces ENME311) and MDPH401 and one (1) of: ENME451, MDPH406 and any applicable Special Topics.