SAMPLE BE(Hons) Mechanical Engineering (Aerospace minor) Conjoint with BSc (Astronomy) – 2026

1st Year Conjoint

S1	COSC131 Introduction to Programming for Engineers	EMTH118 Engineering Mathematics 1A	PHYS101 Engineering Physics A	ASTR112 Astrophysics	
S2	ENGR102 Engineering Mechanics	EMTH119 Engineering Mathematics 1B	CHEM111 Chemical Principles and Processes	ENGR101 Foundations of Engineering	PHYS102 Engineering Physics B: Modern Physics and Electromagnetism (2)

ENGR100 Academic Writing Assessment

2nd Year Conjoint

S1	ENME201 Design Communication	ENME202 Stress, Strain and Deformation in Machine Elements	EMTH210 Engineering Mathematics 2	PHYS285 Technical and Professional Skills for Physicists	PHYS205 Waves, Optics and Mechanics
S2	ENME221 Engineering Design and Manufacture	ENME203 Dynamics and Vibrations		PHYS206 Electromagnetism and Materials	PHYS203 Relativistic and Quantum Mechanics

ENME199 Workshop Training Course for Mechanical and Mechatronics Engineering

ENGR200 Engineering Work Experience

3rd Year Conjoint

S1	ENME207 Materials Science and Engineering		MATH203 Linear Algebra	SCIE101 Science, Society and Me	PHYS311 Quantum Mechanics
S2	ENME215 Engineering Thermodynamics	EMTH271 Mathematical Modelling and Computation 2	MATH202 Partial Differential Equations	ASTR211 Observational Astronomy	PHYS313 Advanced Electromagnetism and Materials

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	PHYS310 Thermal, Statistical and Particle Physics
S2	ENME362 Aerospace Design and Production Management (limited entry)	ENME302 Computational and Applied Mechanical Analysis	ENME315 Heat Transfer		ASTR323 Stellar Structure and Evolution or ASTR325 The Structure and Evolution of Galaxies

ENGR200 Engineering Work Experience

5th Year Conjoint

S1	ENME408 Honours Research and Development Project (FYP)	ENME401 Mechanical Systems Design	400-level Aerospace Engineering elective	ASTR332 Theoretical and Observational Cosmology	100-level or above Science elective (e.g. PHYS326 Classical Mechanics and Symmetry Principles)
S2		ENME418 Engineering Management and Professional Practice for Mechanical Engineers	400-level Aerospace Engineering elective	ASTR381 Advanced Experiments in Physics and Astronomy	

ENGR200 Engineering Work Experience

Conjoint: Conjoint electives may vary depending on the conjoint partner. This includes the elective within the program and the semester of delivery.
ENME307 has been removed from the Mechanical program to allow enough points with the elective. Information on available Conjoint Partners can be found HERE.
Minors: Require all specified Mechanical Engineering course requirements plus an ENME408 FYP in chosen minor and the following:
From 2022 Aerospace Minor: ENME362 and two (2) of: ENGR401, ENME404, ENME460 and any applicable Special Topics. *Admission into ENME362 and the Aerospace minor is guaranteed for students enrolled in this conjoint plan (Mechanical + Astronomy).*
From 2019 Biomedical Minor: ENME351 and MDPH401 and one (1) of: ENME451, MDPH406 and any applicable Special Topics.
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 plans to the Faculty of Engineering student advisors at engdegreeadvice@canterbury.ac.nz or phone 03 369 1717.