

Required and recommended background subjects (JULY 2025)



Each year we field many questions from students, teachers and parents regarding prerequisites for first-year courses. Students are keen to know which Year 13 subjects they should take in order to best prepare them for success in their chosen university programme.

Below is a list of programmes offered by the University of Otago, and recommended school subjects. Most of these are not compulsory but are useful for best preparation.

The key

The Language-rich* category includes reading, research and written communication-based subjects such as English, History, Classics and History of Art, etc.

(+) Background learning useful

(++) Background learning recommended

If you have questions about course requirements, please contact the Liaison Office: liaison@otago.ac.nz

Arts/Humanities

It is possible to begin all Arts/Humanities (BA) majors (Anthropology to Tourism, Languages and Cultures) without a background in those subjects – even languages. Students who enjoy subjects at school such as English, History, Classics, Media Studies and Drama are encouraged to consider the full range of Arts majors as options for study. Music Performance students should have a background in music and are required to audition.

Specialist degrees	Language-rich*	Other useful supporting subjects
Law (LLB)	++	Debating, English, History, Social Sciences, Te Reo Māori
Social Work (BSW)	++	Social Sciences
Theology (BTheol)	++	Social Sciences, Religious Education
Music (MusB)	++	Music
Performing Arts (BPA)	++	Drama, Music, Dance
Teaching (Secondary)	++	Focus on teaching areas
Teaching (Primary/Early Childhood Education)	++	English, Mathematics, Sciences

Commerce/Business

	Statistics	Calculus	Language-rich*	Other useful supporting subjects
Accounting	+		+	Accounting, Business Studies
Business Analytics	++		+	Economics, Business Studies
Economics	+		+	Economics, Business Studies
Entrepreneurship			+	Business Studies
Finance	+	+	+	Accounting, Economics, Business Studies
Human Resource Management	+		+	Business Studies
International Business	+		+	Economics, second language, Business Studies
Management	+		+	Business Studies
Marketing	+		+	Business Studies
Philosophy, Politics and Economics (PPE)	+		+	Economics
Tourism	+		+	Geography, Tourism, Business Studies

Engineering – required subjects for engineering

	Statistics	Calculus	Language-rich*	Other useful supporting subjects
BE(Hons) Software Engineering		14 credits L3		Digi Tech, Physics

Health Sciences – required background subjects to Year 13

	Chemistry	Biology	Physics	Statistics	Calculus	Language-rich*
Oral Health		14 credits L3				++
Dental Technology	14 credits in: 2x Level 3 NCEA approved subjects from Science, Maths or Technology; Physics strongly recommended					
Radiation Therapy	14 Level 3 credits in: Physics or Biology and Maths, Statistics or Calculus					

Health Sciences – recommended background subjects to Year 13

	Chemistry	Biology	Physics	Statistics	Calculus	Language -rich*	Other useful supporting subjects
Health Sciences First Year	++		++		++	++	PE, Statistics, Biology, English
Biomedical Sciences	++	+		+		+	PE
Bachelor of Health Sciences (all majors)		++		++		++	Social Sciences, Chemistry, Health, PE
Pharmaceutical Science	++	+	++		++	+	PE

Sciences

	Chemistry	Biology	Physics	Statistics	Calculus	Language -rich*	Other useful supporting subjects
Agricultural Innovation	++	++		+	+		Geography, Sciences, Digi Tech, Agriculture
Anatomy	++	++		+			
Aquaculture and Fisheries	+	++		++			Geography, Sciences
Biochemistry	++	++		+	or +	+	
Botany		++		+			Chemistry, Sciences
Chemistry	++						
Computer Science				+	+	+	Digi Tech
Data Science				++	+		Digi Tech
Ecology		++		++			Geography, Sciences
Economics				++	++	+	Economics
Environmental Management		+		++	++		Geography, Sciences
Exercise and Sport Science		++		++	+		PE, Sciences, Maths
Food Science	+	+		+	or +		Business, Food Tech, Home Ec, Sciences
Forensic Analytical Science	++	++		++	+		Physics
Genetics	++	++		++	or		
Geographic Information Systems				+	++		Digi Tech, Geography
Geography				++			Geography, Sciences
Geology		+		++	++		Geography, Chemistry, Physics
Human Nutrition	++	++		+		+	Food Tech, Home Ec
Land Planning and Development					or ++		Geography, Digi Tech
Marine Science		++		++	++		Chemistry, Geography, Physics
Mathematics				++	++		Digi Tech
Microbiology	++	++		+			
Neuroscience	++	++	+	+	or		
Pharmacology	++	++		+			
Physical Education, Activity and Health		++		+		+	PE, Sciences, Social Sciences
Physics			++		++		
Physiology	++	++		+			Physics
Plant Biotechnology	++	++		+			
Psychology		++		++		+	
Sport Development and Management		++				+	PE, Business, Social Sciences
Sport and Exercise Nutrition	++	++		+			PE, Food Tech, Home Ec
Statistics				++	++	+	
Sustainable Energy			++		++		Geography
Surveying (BSurv)					++	+	Geography, Digi Tech
Surveying Measurement					++	+	Geography, Digi Tech
Zoology		++		++			