



**QMC CAREERS &  
PATHWAYS GUIDE  
2021**

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# University Entrance

To gain entrance to university students need to achieve at least University Entrance, also known as UE

## UE for NCEA

**Numeracy** **10 credits from Level 1 Mathematics** or higher from specified achievement standards or 3 specific numeracy unit standards

**Literacy** **10 credits at Level 2 or above** from specified achievement standards and made up of:

5 credits in reading

5 credits in writing

**Level 3** **Achievement of NCEA Level 3:** minimum of 60 credits at level 3 or higher and 20 credits at level 2 or higher. Students must gain **14 credits from each of 3 approved subjects**. Plus Level 1 Literacy and Numeracy

## UE for IB Diploma

You must be awarded the full IB Diploma and gain a minimum of 24 points.

An IB Diploma completed with English as Language A1 at either Higher or Standard Level, and including any mathematics subject, satisfies the literacy and numeracy requirements for University Entrance. Gaining Language B at Higher Level, will also satisfying the Literacy requirement for UE.

# Ranking Systems and Limited Entry Tertiary Courses

This information is updated by tertiary institutions on a regular basis. For the most current information please check University websites or prospectuses.

## Limited Entry Courses

These are popular courses where the demand for entry is greater than the number of places available. Therefore, these courses often require higher entry criteria than University Entrance. Some courses also have prerequisite subject requirements.

## Ranking or Scoring Systems

In order to rank or score students based on their academic achievements, universities use a scoring system based on the results in the final year of study.

## NCEA Scores

The score is based on best 80 credits at Level 3 or higher, over a maximum of 5 approved subjects, weighted by the level of attainment achieved. The maximum rank score is 320 and a maximum of 24 credits from each approved subject

Level of Attainment	Points
Excellence	4
Merit	3
Achieved	2

Example of an NCEA score

Subject	Results	Calculate	Rank score
English	6E, 6M, 9A	$(6 \times 4) + (6 \times 3) + (9 \times 2)$	60
History	8E, 9A	$(8 \times 4) + (9 \times 2)$	50
Physics	20M	$(20 \times 3)$	60
Maths with Calculus	4E, 3M, 8A	$(4 \times 4) + (3 \times 3) + (8 \times 2)$	41
Economics	7M, 10A*	$(7 \times 3)$ (*10A not counted)	21
	<b>Total 90 credits</b>		<b>Total: 232</b>

\*10 'Achieved' credits of Economics do not count as only take best 80 credits over five subjects

## IB Diploma

Your rank score is the same as your IB score. For example, if you achieve 27 points for IB, your rank score will be 27 points. The maximum rank score is 45

## Entry requirements at University of Auckland

To be admitted to the University of Auckland, you must gain their University Entrance Standard and be selected into a programme

<b>Degree</b>	<b>Requirement</b>
Bachelor of Laws (LLB) Part I	Students must be offered a place in another Bachelors degree. Students who gain entry to Law Part II can be admitted to the conjoint degree at that stage even if they were not in a conjoint previously.
Bachelor of Medicine and Bachelor of Surgery (MChB)	Applicants must first complete Year 1 of either the BHSc or the BSc in Biomedical Science, or have completed another degree approved by the Faculty of Medical and Health Sciences.
Bachelor of Pharmacy (BPharm)	Applicants should first complete Year 1 of either the BHSc or the BSc in Biomedical Science (or an equivalent programme of study), or have completed another degree approved by the Faculty of Medical and Health Sciences.
Bachelor of Optometry (BOptom)	Applicants must first complete the set courses from the common year of the BSc in Biomedical Science (or equivalent), or have completed another degree approved by the Faculty of Medical and Health Sciences.

Examples of Rank scores and subject requirements for guaranteed admission at Auckland University (as of February 2021):

<b>Degree</b>	<b>NCEA</b>	<b>IB</b>
<b>Advanced Science</b>	<b>260</b>	<b>31</b>
Architectural Studies	<b>230</b> Students who meet UE will be selected on academic achievement, written statement and portfolio	<b>31</b>
Arts	<b>150</b>	<b>26</b>
Commerce	<b>180</b>	<b>27</b>
Dance Studies	<b>150</b>	<b>26</b>
Design	<b>180</b>	<b>27</b>
Education	<b>150</b> Interview and referees reports required + Police and safety check	<b>26</b> Interview and referees' reports required + Police and safety check
Engineering	<b>260</b> 17 external Level 3 in Calculus and 16 external Level 3 Credits in Physics	<b>33</b> with Mathematics and Physics at HL Levels
Global Studies	<b>210</b> Minimum of 16 credits in each of three subjects from the NCEA approved subject list. Study of an additional language is encouraged.	<b>28</b>
Health Sciences	<b>250</b>	<b>33</b>
Music	<b>150</b> Plus qualitative statement of musical background, music certificates, referees' report. Audition for Classical, Jazz Performance and Popular Music majors. Portfolio of compositions for composition major	<b>26</b> Plus qualitative statement of musical background, music certificates, referees' report. Audition for Classical, Jazz Performance or Popular Music majors. Portfolio of compositions for composition major
Nursing	<b>230</b> with minimum of 18 from one of Biology, Chemistry, Physics	<b>31</b>
Urban Planning	<b>230</b> plus written statement	<b>31 plus</b> written statement
Property	<b>180</b>	<b>27</b>
<b>Science:</b> Advanced Sci Food Nutrition Biomedical Sci Exercise Sci Other majors	<b>260</b> <b>200</b> <b>280</b> <b>180</b> <b>165</b>	<b>33</b> <b>28</b> <b>33</b> <b>28</b> <b>26</b>
Social Work	<b>150</b> + interview, referees' reports + Police and safety checks	<b>26</b> + interview, referees' report + Police and safety checks
Sport, Health & Physical Education	<b>150</b>	<b>26</b>
Conjoints	<b>210-275</b> (depending on degrees)	<b>28-36</b> (depending on degrees)

## Entry requirement at Otago University

There are two pathways for admission to programmes at Otago University, known as **Preferential Entry** and **Competitive Entry**. Preferential entry guarantees high-calibre students a place at Otago, subject to gaining University Entrance.

**Preferential Entry criteria** - students who fulfil any one of the criteria below:

- ✓ NCEA Level 2 or 3 endorsed with merit or excellence
- ✓ Rank score of 140 points from NCEA Level 3 or IB of 26 points
- ✓ Acceptance into Halls of Residence
- ✓ Award of University of Otago scholarship
- ✓ Maori or Pacific applicant (Polynesian or Melanesian descent) who gains University Entrance
- ✓ International student meeting minimum university entrance

**Competitive Entry:** process for students who do not gain preferential entry. Students will be assessed on academic performance and other relevant criteria. Applicants entering via Special Admission or Discretionary Entrance will also be through the Competitive Entry pathway

## Health Science First Year at Otago (HSFY)

This course counts as the first year of study for a number of professional/restricted entry programmes and majors

### Professional Programmes

HSFY counts as the first year of study for Health Sciences professional programmes:

Dentistry  
Medical Laboratory Science  
Medicine  
Pharmacy  
Physiotherapy

### Restricted-entry programmes

HSFY is useful preparation, but not required, for Health Sciences restricted-entry programmes:

Dental Technology  
Oral Health  
Radiation Therapy  
Bachelor of Health Sciences

### Other Majors

HSFY counts towards the requirement of the following majors:  
Community Health Care

Māori Health

Pacific and Global Health  
Public Health  
BSc and BBiomedSc degrees

HSFY counts as the first year of study for the following majors:

Anatomy  
Biochemistry  
Drugs and Human Health  
Functional Human Biology  
Genetics  
Human Nutrition  
Infection and Immunity  
Microbiology and Immunology  
Molecular Basis of Health and Disease  
Neuroscience  
Nutrition and Metabolism in Human Health  
Pharmacology and Toxicology  
Physiology  
Reproduction, Genetics and Development

## Entry requirement at Canterbury University

In order to gain basic entry to Canterbury University you must attain University Entrance. Some programmes do have specific requirements

Degree	NCEA	IB
<b>Commerce</b>		
Engineering	<ul style="list-style-type: none"> <li>18 credits are strongly recommended in all subjects</li> </ul> You should have at least <ul style="list-style-type: none"> <li>14 credits in L3 Maths/Calculus including differentiation and integrations</li> <li>14 credits in L3 Physics</li> <li>14 credits in L3 Chemistry (for some engineering courses)</li> </ul>	<ul style="list-style-type: none"> <li>minimum of 4 HL (or 6 SL) in each of maths and physics (HL is recommended)</li> <li>minimum of 4 HL (or 6 SL) in chemistry (for some engineering courses)</li> </ul>
Fine Arts	<ul style="list-style-type: none"> <li>achieved NCEA Level 3 Visual Arts in one or more subjects; and</li> <li>at least 14 credits in each of two other NCEA Level 3 subjects (that are not practical art subjects) is also strongly recommended;</li> <li>All applicants also need to submit an application form, a letter of introduction, and a portfolio.</li> </ul>	<ul style="list-style-type: none"> <li>Visual Art</li> <li>All applicants also need to submit an application form, a letter of introduction, and a portfolio.</li> </ul>
Music	<ul style="list-style-type: none"> <li>Strongly recommended to have L2 or 3 Music</li> <li>Entry to performance courses is awarded on the basis of an auditions</li> <li>Entry to composition or song writing courses requires submission of pieces of work</li> </ul>	
Product Design	<ul style="list-style-type: none"> <li>Strongly recommended to have 14 credits in Level 2 Science and Maths.</li> <li>For those taking Formulation Design major – 14 credits at Level 3 Chemistry</li> </ul>	

## Entry requirement at Victoria University

School leavers who attain University Entrance and the required guaranteed entry score will be accepted for Victoria University.

Guaranteed Entry score	NCEA	IB
All degrees except BAS and BBS	150	28
BAS and BBS	180	29

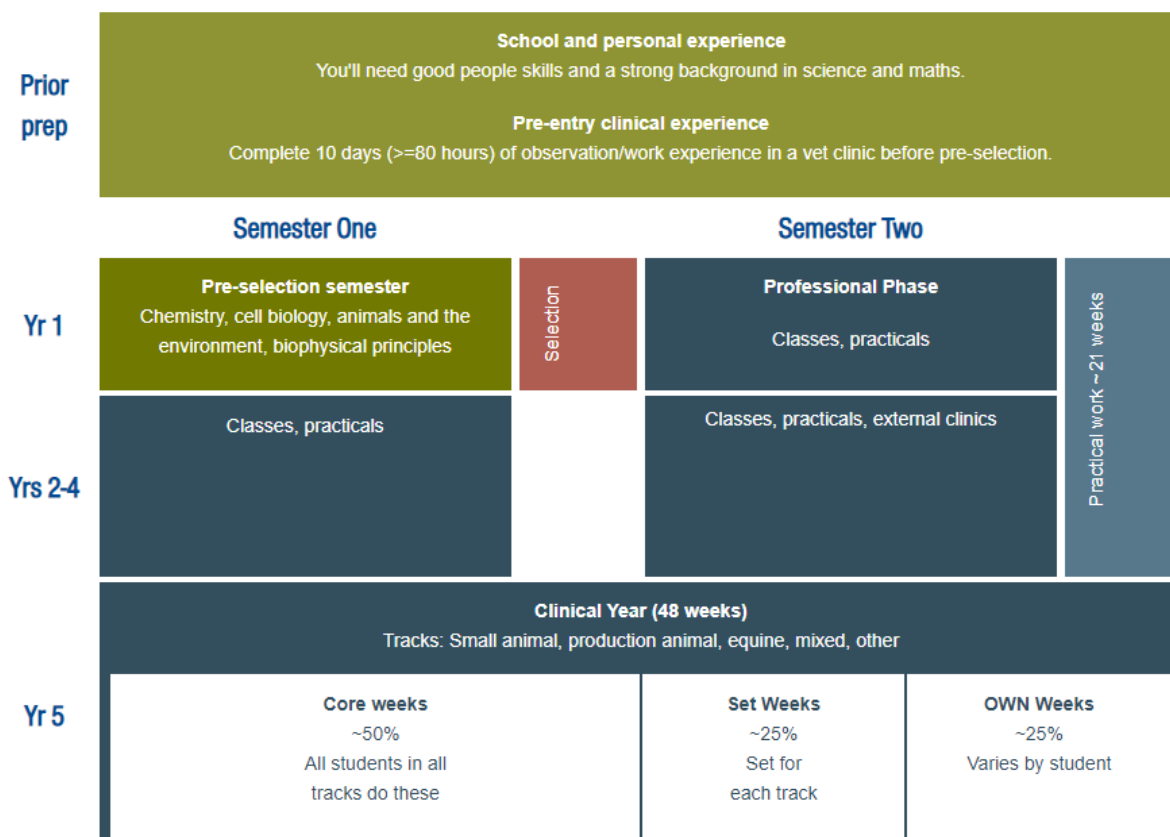
BAS = Bachelor of Architectural Studies. BBS = Bachelor of Building Science.



## Entry requirement at Massey University

A rank score admissions scheme is used at Massey University. Preference will be given to students who achieve a rank score of 140 points (NCEA students) and 31 points (IB) and meet University Entrance plus specific requirements for each course.

Massey is currently the only place in NZ to offer Veterinary Science. The diagram below shows details of the selection procedure for their BVSc professional course



# Useful Websites

## University and Polytechnic Websites:

University of Auckland .....	<a href="http://www.auckland.ac.nz">www.auckland.ac.nz</a>
AUT University.....	<a href="http://www.aut.ac.nz">www.aut.ac.nz</a>
Manukau Institute of Technology.....	<a href="http://www.manukau.ac.nz">www.manukau.ac.nz</a>
Massey University.....	<a href="http://www.massey.ac.nz">www.massey.ac.nz</a>
Unitec.....	<a href="http://www.unitec.ac.nz">www.unitec.ac.nz</a>
Lincoln University.....	<a href="http://www.lincoln.ac.nz">www.lincoln.ac.nz</a>
University of Canterbury.....	<a href="http://www.canterbury.ac.nz">www.canterbury.ac.nz</a>
University of Otago .....	<a href="http://www.otago.ac.nz">www.otago.ac.nz</a>
University of Waikato .....	<a href="http://www.waikato.ac.nz">www.waikato.ac.nz</a>
Victoria University of Wellington .....	<a href="http://www.victoria.ac.nz">www.victoria.ac.nz</a>
Help with choosing degree majors .....	<a href="http://www.nomajordrama.co.nz">www.nomajordrama.co.nz</a>

## Apprenticeships

Modern Apprenticeships.....	<a href="https://www.careers.govt.nz/plan-your-career/find-out-about-study-and-training-options/apprenticeships/">https://www.careers.govt.nz/plan-your-career/find-out-about-study-and-training-options/apprenticeships/</a>
Building.....	<a href="http://www.bcito.org.nz">www.bcito.org.nz</a>
Electrical .....	<a href="http://www.etco.co.nz">www.etco.co.nz</a>

## Industry-specific websites

Service IQ.....	<a href="https://www.serviceiq.org.nz/schools/welcome-to-serviceiq-for-schools/">https://www.serviceiq.org.nz/schools/welcome-to-serviceiq-for-schools/</a> (Connecting people to careers in Aviation, Hospitality and Tourism)
Dairy Industry Careers .....	<a href="https://www.primaryito.ac.nz/courses-for-you/dairy/">https://www.primaryito.ac.nz/courses-for-you/dairy/</a>
Nursing in NZ.....	<a href="http://www.moh.govt.nz/nursing">www.moh.govt.nz/nursing</a>
Retail Careers .....	<a href="http://www.rwr.co.nz/for-candidates/career-map/">www.rwr.co.nz/for-candidates/career-map/</a>
Air NZ Aviation .....	<a href="http://www.aviationinstitute.co.nz/ai/">http://www.aviationinstitute.co.nz/ai/</a>
Teaching .....	<a href="https://teachingcouncil.nz/getting-certificated/getting-started/becoming-a-teacher/">https://teachingcouncil.nz/getting-certificated/getting-started/becoming-a-teacher/</a>

## Forces

Airforce, Army, Navy .....	<a href="http://www.defencecareers.mil.nz">www.defencecareers.mil.nz</a>
Police .....	<a href="https://www.newcops.co.nz/">https://www.newcops.co.nz/</a>

## Other useful websites

- Information on planning financial future.....[www.sorted.org.nz](http://www.sorted.org.nz)
- Student loans and allowances.....[www.studylink.govt.nz](http://www.studylink.govt.nz)
- Careers in Technology, Engineering, Science .....[www.futureintech.com](http://www.futureintech.com)
- Approved NZQA courses: .....  
<http://www.nzqa.govt.nz/qualifications-standards/awards/university-entrance/approved-subjects/>
- Tertiary study in USA..... <https://educationusa.state.gov/> and [www.fulbright.org.nz](http://www.fulbright.org.nz)

# Subject choice guide

When you are selecting subjects, it is important to **keep your options open** for future career opportunities. Many tertiary courses have prerequisite subjects and specific entry requirements, and it is important that you are aware of this, when making subject choices. As you make decisions about which subjects to take, consider the following:

- What subjects do you really enjoy?
- What is your current ability in each subject you are studying?
- Avoid selecting subjects just because your friends are taking them or you like the current year's teacher.
- Consider what you want to do in the future and check out the [entry requirements](#) and [recommended subjects](#) for future tertiary courses and apprenticeships (Pages 13 to 15)
- Talk to teachers and senior students to find out more information about the content of subjects.
- Get further help by talking to staff e.g. Head of Careers, Deputy Principals, Heads of Departments.
- Remember that it is very difficult to pick up some subjects later, instead they should be studied sequentially (e.g. languages).

## School Subjects and Entry Requirements for Career pathways

The summary on the following pages provides a brief outline of some career pathways beyond school and recommended subjects. It is intended to assist students when selecting school subjects so that future career choices remain open. Details of entry requirements can also be found under the Job search section on **Careers Central**.

Important:

- Entry into many courses is dependent on grades/level of achievement as well as subject choice
- There are numerous occupations not on this list. You are advised to visit the Careers Centre to obtain specific details
- You should also check current entry requirements and pre-requisites from the websites and prospectuses of the tertiary institution you are interested in
- Some universities publish guides to recommended school subjects, see links below

### Auckland University

<https://www.auckland.ac.nz/en/study/study-options/undergraduate-study-options/information-for-careers-advisors/guide-to-choosing-school-subjects.html>

### Canterbury University

<https://www.canterbury.ac.nz/support/get-support/year-11-12/>

### Otago University

<https://www.otago.ac.nz/future-students/otago654586.pdf>

### Victoria University of Wellington

<https://www.wgtn.ac.nz/study/course-planning/school-subjects>

Also check out **Careers Central** and the Careers Services website [www.careers.govt.nz](http://www.careers.govt.nz)

**Up-dated February 2021 – please check individual university and course requirements for the most up-to-date information.**

Career	Qualification	Recommended subjects
Agriculture	Diploma	Level 2 Chemistry, Mathematics, English, Biology, Physics
	Degree	IB/ Level 3 Chemistry, Mathematics, Biology, Physics
Apprenticeships (many including building, plumbing, electrical)	National Certificate	Mathematics, English, General Science, Carpentry, Furniture- making, Graphics Physics Level 2 for Electrical
Architecture	Masters degree (total 5 years)	Highly recommended: IB/ Level 3 Visual Arts subjects, Maths, English Level 3
Architectural Technology	Diploma	Level 2 Mathematics, Physics, English, Graphics, Design
Automotive Engineering (Mechanic)	Certificate	Level 1 English, Mathematics
Aviation (1) Airforce (2) Massey (3) Flying school (4) Air New Zealand Certificate in Aeronautical Engineering	Pilot/Navigator	English, Mathematics and Science subjects (preferably Physics)
	B Aviation	IB/ Level 3 Level Physics, Mathematics, English
	Pilot Training	Level 2 Level Physics, Mathematics, English
	National Certificate	Year 12 English, Mathematics and Science subject (pref. Physics)
Business/ Commerce	Degree – available at most universities	IB/ Level 3 Mathematics. Accounting, Economics recommended. Calculus if majoring in Economics or Finance
Computing/IT	Degree – available at most universities (often found under Science Faculties)	IB/ Level 3 Mathematics with Calculus. Statistics, Physics, Economics, English
Construction Management/ Quantity Surveying	Degree	IB/ Level 3 Mathematics. Economics, Physics recommended
	Diploma	Level 2 Mathematics, Economics
Dentistry	Degree (Otago)	IB/ Level 3 Biology, Chemistry, English, Mathematics, Physics
Design	Degree	IB/ Level 3 Art Subjects. English, Graphics useful.
Engineering	Degree (4 years)	IB/ Level 3 Physics and Level 3 Mathematics with Calculus. IB/ Level 3 Chemistry required for some programmes.
Fine Arts	Degree	IB/ Level 3 Visual Arts subjects
Food Science, Nutrition	Degree	IB/ Level 3 Biology, Chemistry, Mathematics, English, Physics
Food Technology	Massey (4 years)	IB/ Level 3 Chemistry, Biology, Physics, Calculus

Hospitality	Degree	IB/ Level 3 English, Mathematics, Commerce subjects
Journalism, Communications	Degree	IB/ Level 3 English, History
Law	Degree (4 years)	IB/ Level 3 English, Classics, History, Economics, Languages
Medical Laboratory Science	Degree (4 years) at AUT, Otago, Massey	IB/Level 3 Mathematics with Statistics Mathematics. IB/ Level 3 Biology, Chemistry, English, Physics
Medical radiation therapy	Degree	IB/ Level 3 English, Mathematics, Biology, Physics
Medicine	Degree (6 years); entry after 1 <sup>st</sup> year	IB/ Level 3 Biology, Chemistry, Physics, Mathematics, English
Midwife	Degree (4 years)	IB/ Level 3 Biology and/or Chemistry
Music	Degree	Music Grade 5 theory recommended
Optometry	Degree (5 years)	IB/ Level 3 Chemistry, Biology, Physics, Mathematics
Pharmacy	Degree (4 years + 1 yr internship)	IB/ Level 3 Biology, Chemistry, Physics, Mathematics, English
Physical Education	Degree (4 years) Otago	Biology, English, Academic PE highly recommended.
Physiotherapy	Degree (4 years)	IB/Level 3 Biology, Chemistry, Physics, English, Mathematics
Urban Planning	Degree	IB/Level 3 Geography, Economics useful
Police	Not required but many study Criminology at university	Level 2 English, Mathematics
Science	Degree	IB/Level 3 Biology, Chemistry, Physics, Mathematics, (Geography)
Social Work	Degree	English, Classics, History, Geography, Economics, Mathematics with Statistics
Sport and Recreation Sports Science	Degree	Biology, English, Geography, Physical Education
Surveying (land)	Degree, 4 years	IB/Level 3 Statistics, Calculus Maths. Physics, Geography, English
Teaching	Degree	IB/Level 3 approved subjects
Urban Planning	Degree	IB/Level 3 Geography, Economics useful
Veterinary Science	Degree	IB/Level 3 Biology and Chemistry. Whilst not recommended Physics would also be preferable given the Biophysical paper in the pre-selection course