

Statistics

Undergraduate Handbook 2018



THE UNIVERSITY OF
AUCKLAND
Te Whare Wānanga o Tamaki Makaurau
NEW ZEALAND

SCIENCE
DEPARTMENT OF STATISTICS

Welcome to the Department of Statistics

Understanding statistics helps you understand our world.



We live in an increasingly data-rich and digital world. The staff in our department apply their knowledge and skills in statistics to many fields – biology, finance, official statistics, engineering, health, marine science, astrophysics and others. They will show you how to extract information from the data around us.

Studying Statistics will enrich your academic journey and career. Over half of all the undergraduate students at the University of Auckland include at least one Statistics course in their degree and there are excellent career prospects for graduates who combine a major in Statistics with other subjects in Business, Science, Engineering, Medicine or Arts.

Whether you are thinking of majoring in Statistics, or just complementing your degree with some Statistics courses, we will be delighted to welcome you to our department in 2018.

ILZE ZIEDINS
Head of Department

Birthplace of 



Bachelor of Science in Statistics

Statisticians have a vital contribution to make in dealing with the problems facing the world. Statistics benefits all of us because we are able to make predictions for the future based on data we have previously gathered. Whatever field of statistics you specialise in, a degree from our department will be an important step in your career.

Preparation for school leavers

High school students are recommended to take mathematics in the form of statistics and/or calculus.

For course planning and enrolment, go to www.science.auckland.ac.nz/student-centre



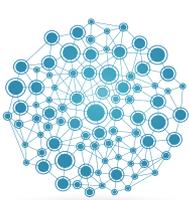
Complementary majors

A double major is strongly recommended as it will enhance your career options by providing a broader base of skills and knowledge. Statistics is suitable as a complementary major with all the other Science majors, and as a conjoint with other faculties. In particular:

STATISTICS +

- Biological Sciences
- Computer Science
- Environmental Science
- Information Systems
- Logic and Computation
- Marine Science
- Mathematics
- Physics
- Psychology

www.science.auckland.ac.nz/doublemajors



Statistics



Mathematics

BSc degree planner – Statistics

BSc

Year 1

STATS 101 or 108	STATS 125	MATHS 108, 110, or 150					
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With appropriate prerequisites can also be filled by Stage II or III.

Year 2

Stats 201 or 208	STATS 210 or 225							GEN ED
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STATS 210 is strongly recommended. STATS 220 and 255 are also recommended.

Any Stage

Year 3

STATS 301-380, or ENGSCI 391	STATS 301-380, or ENGSCI 391	STATS 301-380, or ENGSCI 391	STATS 301-380, or ENGSCI 391					GEN ED
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Stage III Science

Stage II or III Science

1. Courses in a minimum of three subjects listed in the BSc Schedule
2. At least 180 points (12 courses) must be above Stage I
3. Up to 30 points (two courses) may be taken from outside the faculty
4. 30 points (two courses) must be taken from the appropriate General Education Schedules for BSc students
5. At least 75 points must be at Stage III, of which 60 points must be in the majoring subject

It is the student's responsibility to check that the final programme complies with University Regulations. The Faculty of Science is the final authority on all BSc regulations.

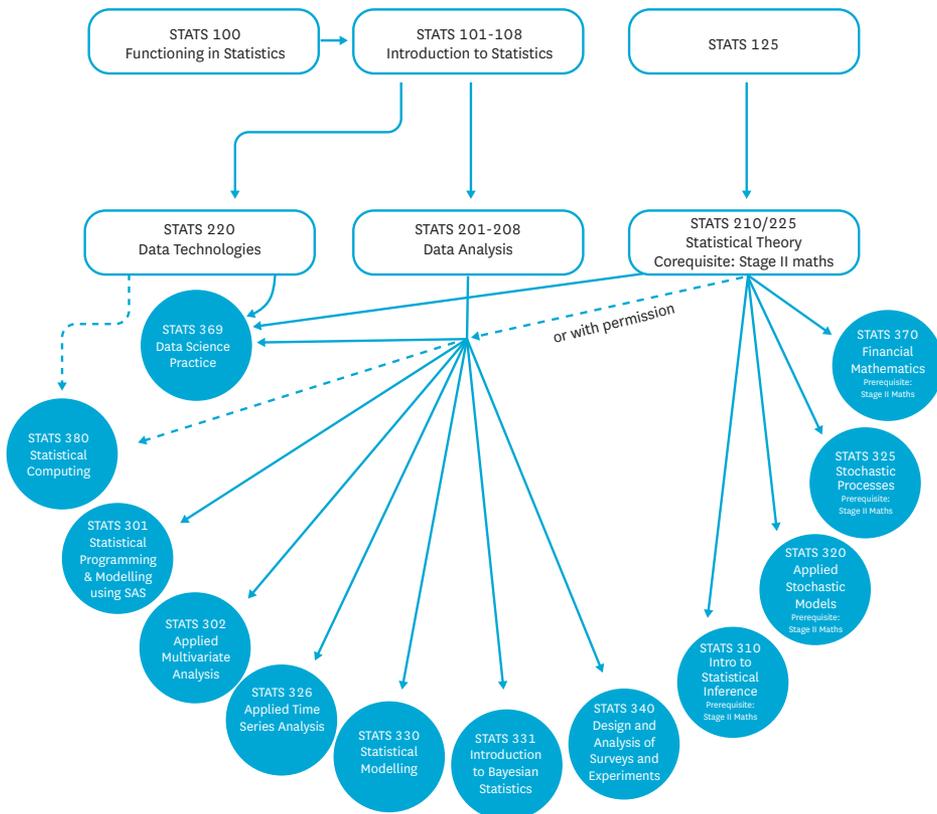
To view regulations for majors, and course descriptions, see www.calendar.auckland.ac.nz
BSc degree requires: 360 points (24 x 15-point courses). Each box represents one 15-point course.
We recommend that students enrol in eight courses each year.

Degree Planners for double majors can be found at www.science.auckland.ac.nz/course-planning

Undergraduate Statistics major

The Statistics major is depicted below

Applied Statistics courses:	STATS 201, STATS 208; STATS 301, STATS 302, STATS 326, STATS 330, STATS 331, STATS 340
Theoretical Statistics courses:	STATS 125; STATS 210; STATS 225; STATS 310, STATS 320, STATS 325, STATS 370. MATHS 340 very useful if going on to postgraduate study
Statistical Computing courses:	STATS 220; STATS 301, STATS 369, STATS 380
Operations Research courses:	STATS 125; STATS 255; STATS 320, STATS 325; ENGSCI 391



For course descriptions and prerequisites, go to www.stats.auckland.ac.nz/courses

Careers in Statistics

Statistics is the human side of the computer revolution, an information science, the art and science of extracting meaning from seemingly incomprehensible data. Statistics applies to almost any field. For this reason, many students find it complements their core area of interest or degree extraordinarily well, giving them an additional string to their bow that opens up new and exciting career opportunities.

- Academic research
- Actuary
- Banking
- Bioinformatics
- Biology
- Business analysis
- Data scientist
- Ecology
- Education
- Energy
- Engineering
- Finance
- Government
- Market research
- Marketing
- Medical statistics
- Operations research
- Organisational psychology
- Policy development
- Statistician (e.g. biometrician)

Hayley Haskell is studying for a Bachelor of Science, majoring in Applied Mathematics and Statistics.

"The University of Auckland is the best place for me to study – for the opportunities available, as well as the quality of education."

"I initially enrolled in another degree, but I discovered my true passion lies with Maths and Stats! In my favourite course last year, we learnt about differential equations and how these skills can be applied to a real-life problem, such as the whaling industry."

"The Department of Mathematics at the University of Auckland has a strong support network, with the Undergraduate Mathematics Community (UMC), as well as drop-in tutoring sessions available. I've found it very easy to form friendships with my classmates, and also get help when I need it."

"I really appreciate the support I've received from the lecturers and teaching staff. My lecturers are inspiring, and their passion for their chosen field is clear!"

"I have a Summer Research Scholarship in Statistics, which has provided me with the valuable experience of academic research."

"I hope to do postgraduate study once I complete my undergraduate degree, and I'm looking to pursue a career in the area of financial mathematics."



Helpful information

Academic dates

www.auckland.ac.nz/dates

Academic Integrity Course

www.auckland.ac.nz/academic-integrity

Accommodation

www.accommodation.auckland.ac.nz

Buy coursebooks

www.science.auckland.ac.nz/resource-centre

Career Development and Employment Services

www.auckland.ac.nz/careers

Course advice and degree planning in Science

www.science.auckland.ac.nz/student-centre

General education

www.auckland.ac.nz/generaleducation

How to apply

www.apply.auckland.ac.nz

How to enrol

www.auckland.ac.nz/enrolment

International students

www.international.auckland.ac.nz

Māori and Pacific students

www.science.auckland.ac.nz/tuakana

Need help?

www.askauckland.ac.nz

Rainbow Science Network for LGBTI students

www.science.auckland.ac.nz/rainbowsience

Scholarships and awards

www.scholarships.auckland.ac.nz

Support for students

www.science.auckland.ac.nz/support



**APPLICATIONS CLOSE ON
8 DECEMBER FOR SEMESTER ONE OR
1 DECEMBER FOR SUMMER SCHOOL.**

**Questions about Statistics?
office@stat.auckland.ac.nz**

Disclaimer

Although every reasonable effort is made to ensure accuracy, the information in this document is provided as a general guide only for students and is subject to alteration. All students enrolling at the University of Auckland must consult its official document, the University of Auckland Calendar, to ensure that they are aware of and comply with all regulations, requirements and policies.



**THE UNIVERSITY OF
AUCKLAND**
Te Whare Wānanga o Tāmaki Makaurau
NEW ZEALAND

Connect with us

Faculty of Science, The University of Auckland
Private Bag 92019, Auckland 1142, New Zealand

Phone: 0800 61 62 63 | Email: scifac@auckland.ac.nz
Web: www.stat.auckland.ac.nz



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