Bachelor of Science
Major in Statistical Data Science

ENTRY REQUIREMENTS

Assumed Knowledge	For astronomy and astrophysics, mathematics, statistical data science and physics majors: HSC Mathematics Advanced (Band 4), or equivalent. If you haven't met the required minimum level of achievement (Band 4 or equivalent), you can undertake an alternative introductory unit of study in that area.
Recommended Studies	HSC Mathematics Advanced or equivalent, at least 2 units of science. For astronomy and astrophysics, and physics majors: HSC Physics. For mathematics major: HSC Mathematics Extension 1 (Band E2) or HSC Mathematics Extension 2, or equivalent.

CORE ZONE

Essential units = Each unit is 10 credit points.

Capstone unit = 10 credit points

FOSE3000	Making Science Work for You and Society: Capstone

Essential units = 20 credit points

FOSE1000	Becoming a Scientist
FOSE2000	The Science Practitioner

Statistics Elective units = 10 credit points

Complete 10 credit points from the following units

STAT1103	Introduction to Psychological Design and Statistics
STAT1170	Introductory Statistics
STAT1371	Statistical Data Analysis

Data and Computing Elective units = 10 credit points

Complete 10 credit points from the following options.

- Students enrolling in Astronomy, Physics, Mathematics or Statistical Data Science majors must enrol in FOSE1030.
- Student enrolling in Biology, Biotechnology, Chemistry, Human Biology, Earth and Environmental Sciences, and Physiological Sciences major must enrol in FOSE1025.
- Students enrolling in double majors that requires both FOSE1025 and FOSE1030 can complete the other Data & Computing unit not selected below in the Other Science - 20 credit points option set.

FOSE1025	Scientific Computing
FOSE1030	Introduction to Python Programming

Other Science Elective units = 20 credit points

20 credit points from ASTR, BIOL, CHEM, EESC, ENVS, MATH, PHYS, PSYU, STAT, BMOL, MOLS, FOSE units at 1000 or 2000 level

Elective unit = 10 credit points

Complete 10 credit points from the following PACE units

MATH3599	PACE: Professional Practice for Mathematical Sciences
MOLS3002	PACE: Engaging the Community in Science

MAJOR

Major requirements = 80 credit points

Essential Units = 20 credit points
Complete each of the following units

STAT1379	Statistical Technologies for Data Science
STAT2114	Design of Experiments and Surveys

Elective Units = 10 credit points
Complete 10 credit points from the following units

MATH1010	Calculus and Linear Algebra I
MATH1015	Calculus and Linear Algebra I (Advanced)

Elective Units = 10 credit points
Complete 10 credit points from the following units

STAT2170	Applied Statistics
STAT2371	Statistics

Elective Units = 10 credit points
Complete 10 credit points from the following units

STAT2173	Introduction to Probability
STAT2372	Probability

Elective Units = 10 credit points
Complete 10 credit points from the following units

STAT3101	Regression and Time Series
STAT3301	Regression and Time Series (Advanced)
STAT3175	Linear Models

Elective Units = 10 credit points
Complete 10 credit points from the following units

STAT3110	Statistical Inference
STAT3310	Statistical Inference (Advanced)

Elective Units = 10 credit points
Complete 10 credit points from the following units

STAT3103	Multivariate Analysis and Statistical Learning
STAT3102	Graphics, Multivariate Methods and Data Mining

FLEXIBLE ZONE

Flexible Zone = 80 credit points

You can use your flexible zone to enrol in any Undergraduate unit for which you meet the requisites. You may also use your flexible zone to complete a second major or minor(s)