

Major in Statistics

The Department of Statistics and Applied Probability in NUS offers an undergraduate major in Statistics. Honours students in this major have the option to specialise either in Data Science or in Finance and Business Statistics.

A brief outline of the modules offered by the department for this major is as follows.

Level 1000

Introduction to Statistics provides students with the basic concepts in statistics.

Level 2000

Students at the second year will learn programming languages, for example the popular software package R that statisticians use, by taking **Computer Aided Data Analysis**. They will also take **Probability** and **Mathematical Statistics**, which provide a foundation for higher-level modules.

Levels 3000 and 4000

Students in their third and Honours year will take modules on important statistical techniques such as **Simulation** and **Regression Analysis**, and also modules on important statistical applications:

1. Finance and business statistics: **Applied Time Series Analysis, Actuarial Statistics, Statistical Methods for Finance**
2. Data science: **Multivariate Statistical Analysis, Statistical Learning** (a.k.a. Data Mining), **Bayesian Statistics, High-dimensional Statistical Analysis, Optimisation for Large-scale Data-driven Inference**
3. Medical and public health data: **Demographic Methods, [Introduction to] Survival Analysis, Statistical Methods in Epidemiology, Survey Methodology**
4. Industrial statistics: **Design and Analysis of Experiments, Statistical Quality Control**

The modules **Categorical Data Analysis, Computer Intensive Statistical Methods, Nonparametric Statistics** equip students with statistical tools to handle specific types of data.

Students have an option to do a final year project over a span of two semesters or a final year internship for a semester; if they progress to the Honours year.

#NUSStatistics



Twins TAY Yu Xuan and TAY Yu Heng both graduated in 2014 with B.Sc. (Hons) in Statistics (Minor in Financial Mathematics)

[Read more..](#)

Young alumni launches Chatbot startup

"The 'can-do spirit' from my Science training ignited my interest in entrepreneurship. I utilise frontier technologies to connect businesses and consumers."

~ Joel FOO, B.Sc. (Hons) in Statistics (2018), Co-Founder of Geboto

[Read more...](#)

STATISTICS

"The data explosion has opened up tremendous opportunities for professionals qualified to manage large and complex datasets. My science education equipped me with technical and soft skills, enabling me to succeed in my job in different industries and countries."

NG Wee Teck
Senior Statistician
Philip Morris International
B.Sc. (Hons) in Statistics, Minors in Computational Science and Mathematics (2003);
M.Sc. in Statistics (2005)

[Read More >>](#)

National University of Singapore

Faculty of Science