



# Statistics as a New Minor Subject

Details for the Academic Year 22/23

## Why take this New Minor Subject?

Data is everywhere. All areas of society, science and business are increasingly data driven. Statistics gives us a unique perspective on the world around us due to the large variety of areas where it is applied. The partnership of mathematics with statistics will give you a strong foundation in problem articulation and problem solving and excellent career options for data focussed industries. You will also be prepared to undertake further study in several empirically driven disciplines such as bioinformatics, marketing and finance.

## What will I learn?

You will have the opportunity to learn how to characterise real world phenomena in a statistical and mathematical language. You will learn how to use observed data to inform your characterisations and gauge uncertainty in their precision. You will learn how to use these informed characterisations to make predictions and forecasts. You will learn how to model phenomena that evolve over time and how we might make forecasts or predictions from this. The phenomena you will meet will include examples from across the spectrum in science, business and society.

## What will I do?

Tools and methods learned in this programme will include classical and Bayesian approaches to inference, Markov models in space and time, time series, Monte Carlo methods and other computational statistical inference methods.

## How will this be assessed?

Statistics is a dynamic and engaging subject. Continuous assessment through problem solving and working with real data through computer labs will form part of your assessment. End of term exams will be a major component of assessment.

## Contacts

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