

Statistics for Mathematics Teachers

This is a bespoke online course for staff who wish to enhance their knowledge of statistics and data analysis in order to teach the SQA Higher Applications of Mathematics.

The course assumes no prior knowledge and covers the basic statistical concepts necessary to address research questions, interpret the results and make valid conclusions. By the end of the course, delegates will have developed a good understanding of the concepts, knowledge of when they are appropriate to use, and an ability to apply them using a statistical software package.

The SQA curriculum will be covered during the course:

- Introduction to probability and statistics, including types of data, symmetric and skewed distributions, graphical and numerical summaries of data, the Normal distribution
- Correlation and Regression
- Hypothesis Testing: parametric tests, p-values and confidence intervals
- Application of the above using statistical software

Delegates may choose to do the course using either Minitab or R Studio statistical software. Access to software and full teaching and learning support materials will be provided and additional online help and support will be available.

This course was developed by David Young and Louise Kelly.

David is a lecturer in the Department of Mathematics and Statistics and a Consultant Statistician for the NHS. In collaboration with the SQA he developed the Higher Unit in Statistics which is the basis of the new higher curriculum.

Louise is a lecturer in the Department of Mathematics and Statistics and a Risk Analyst with the Animal and Plant Health Agency. She is also the Faculty of Science Associate Dean for Admissions and Digital Development.

Delivery: This module will be delivered online via the University of Strathclyde from Monday 16th October to Friday 15th December 2023.

Credit Value: 10 Credits (SCQF Level 7) – a formal university CPD transcript will be provided upon completion of the course.

How to apply: To reserve a place, express an interest or for more information on this course, please contact ma-sqastats@strath.ac.uk

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