



Introduction to Statistics Online programme

Session timings

Session times are:

Module 1: 09:30-12:30 GMT/BST

Module 2: 13:30-16:30 GMT/BST

Sessions will include a mixture of presentations, interactive exercises and practice calculations.

Training is delivered via MS Teams

Module	Topics
Module 1	<u>Summarising data</u> <ul style="list-style-type: none">• Populations and samples of data• Distributions of data• Summary statistics<ul style="list-style-type: none">○ mean, standard deviation, relative standard deviation, standard deviation of the mean• Basic Excel functions <u>Introduction to significance testing</u> <ul style="list-style-type: none">• Uses of significance testing (with a focus on method validation)• Types of significance test (t- and F-tests)• Significance testing procedure<ul style="list-style-type: none">○ hypotheses, level of significance, number of tails, critical values, assessing significance
Module 2	<u>Applications of significance tests</u> <ul style="list-style-type: none">• Different types of t-test and examples of their applications• Use of the F-test for comparing variances• Introduction to analysis of variance<ul style="list-style-type: none">○ examples of use in method validation <u>Applications of statistics in quality assurance</u> <ul style="list-style-type: none">• Construction and interpretation of control charts• Interpreting results from proficiency testing schemes