



**Method Validation
Day 1
Essential statistics**

09:00 *Registration and coffee*

Morning session

09:20 Introduction to course

Introduction to statistics: Description of data

Workshop A1: Calculation of statistical parameters

Introduction to significance testing

Workshop A2: Simple tests using mean values

Significance testing: *t*-tests

Workshop A3: Significance testing, *t*-tests

Afternoon session

Significance testing: The F-test

Workshop A4: Significance testing, the F-test

Analysis of Variance

Workshop A5: ANOVA, types of hypotheses, interpretation of results

Linear regression: Interpretation of parameters and pitfalls

Workshop A6: Linear regression

17:20 *Close*

Method Validation Course
Day 2
Providing the tools

Morning session

09:00 Introduction to method validation

Workshop B1 (Part 1): Building a validation protocol

Performance parameter 1: Precision, different precision parameters, description and how each is estimated

Workshop B2: Interpreting precision data

Afternoon session

Performance parameter 2: Bias, experiments for estimation, tests for bias

Workshop B3: Interpreting data on bias

Performance parameter 3: Ruggedness, experiments to evaluate ruggedness

Workshop B4: Designing and interpreting ruggedness tests

Workshop B1 (Part 2): Validation protocol – plan experiments for precision, bias and ruggedness

17:00 *Close*

Method Validation Course
Day 3
Further tools

Morning session

09:00 **Performance parameters 4: Selectivity, LoD and LoQ**

Workshop C1: Examples illustrating lack of selectivity, how to evaluate LoD and LoQ

Performance parameters 5: Linearity and working range

Workshop C2: Interpreting linearity and range data

Afternoon session

Workshop B1 (Part 3): Validation protocol – plan experiments for selectivity, detection capability and linearity

Measurement uncertainty: Estimations using validation data

Workshop C3: Evaluating measurement uncertainty

Workshop C4: Revision exercises

16:30 *Close*