

**Method Validation Course**  
**Day 1**  
**Essential statistics**

<b>09:00</b>	<i>Registration and coffee</i>
<b>09:30</b>	Introduction
<b>09:40</b>	<b>Introduction to statistics:</b> Description of data
<b>10:00</b>	<b>Workshop A1:</b> Calculation of statistical parameters
<b>10:40</b>	<i>Break</i>
<b>11:00</b>	<b>Significance testing:</b> <i>t</i> -tests
<b>11:30</b>	<b>Workshop A2:</b> Significance testing, <i>t</i> -tests
<b>12:05</b>	<b>Significance testing:</b> The F-test
<b>12:20</b>	<i>Lunch</i>
<b>13:20</b>	<b>Workshop A3:</b> Significance testing, the F-test
<b>14:00</b>	<b>Analysis of Variance</b>
<b>14:35</b>	<b>Workshop A4:</b> ANOVA, types of hypotheses, interpretation of results
<b>15:15</b>	<i>Break</i>
<b>15:35</b>	<b>Linear regression:</b> Part 1. Interpretation of parameters and pitfalls
<b>15:50</b>	<b>Workshop A5:</b> Linear regression (I)
<b>16:05</b>	<b>Linear regression:</b> Part 2
<b>16:30</b>	<b>Workshop A6:</b> Linear regression (II)
<b>17:20</b>	<i>Close</i>

***All timings are approximate***

**Method Validation Course**  
**Day 2**  
**Providing the tools**

<b>09:00</b>	<b>Introduction to method validation</b>
<b>09:45</b>	<b>Workshop B1 (Part 1):</b> Building a validation protocol
<b>10:15</b>	<i>Break</i>
<b>10:35</b>	<b>Performance parameter 1: Precision</b> , different precision parameters, description and how each is estimated
<b>11:15</b>	<b>Workshop B2:</b> Interpreting precision data
<b>12:10</b>	<i>Lunch</i>
<b>13:10</b>	<b>Performance parameter 2: Bias</b> , experiments for estimation, tests for bias
<b>13:35</b>	<b>Workshop B3:</b> Interpreting data on bias
<b>14:30</b>	<b>Performance parameter 3: Ruggedness</b> , experiments to evaluate ruggedness
<b>14:50</b>	<i>Break</i>
<b>15:10</b>	<b>Workshop B4:</b> Designing and interpreting ruggedness tests
<b>15:50</b>	<b>Workshop B1 (Part 2):</b> Validation protocol – plan experiments for precision, bias and ruggedness
<b>16:45</b>	<i>Close</i>

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**Method Validation Course**  
**Day 3**  
**Further tools**

<b>09:00</b>	<b>Performance parameters 4: Selectivity, LoD and LoQ</b>
<b>09:45</b>	<b>Workshop C1:</b> Examples illustrating lack of selectivity, how to evaluate LoD and LoQ
<b>10:30</b>	<i>Break</i>
<b>10:50</b>	<b>Performance parameters 5: Linearity and working range</b>
<b>11:10</b>	<b>Workshop C2:</b> Interpreting linearity and range data
<b>12:10</b>	<i>Lunch</i>
<b>13:10</b>	<b>Workshop B1 (Part 3):</b> Validation protocol – plan experiments for selectivity, detection capability and linearity
<b>14:10</b>	<i>Break</i>
<b>14:30</b>	<b>Measurement uncertainty:</b> Estimations using validation data
<b>15:00</b>	<b>Workshop C3:</b> Evaluating measurement uncertainty
<b>15:45</b>	<b>Workshop C4:</b> Revision exercises
<b>16:30</b>	<i>Close</i>

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