Essential Statistics

Find out how to make the most of your data

Free online training on summarising and comparing data sets

18 March 2026

Essential statistics for analytical science

Ensuring the quality of analytical data is a vital aspect of the work of an analytical scientist. The effective planning of experiments and evaluation of data requires an understanding of statistics. Knowledge of statistics is also needed to carry out method validation, evaluate measurement uncertainty and implement quality control.

Whether developing test methods, optimising processes or assessing the efficacy of biofilm controls, objective evaluation of data is required.

Join us on this **free 1-day online course** to learn about the key statistical tools for summarising data and making statistical comparisons of data sets.

Online course via MS Teams

Registration information overleaf

BIOFILM ALLIANCE
Regulatory Science Network

Training brought to you by the Biofilm Alliance

Essential Statistics for Analytical Science

Outline programme (2 x 2.5 hr online sessions)

- Summarising data
  - Populations, samples and distributions of data
  - Summary statistics
  - Basic Excel functions
- Introduction to significance testing
  - Principles of data comparison
  - Types of significance test
  - Procedure for significance testing

- Applications of significance tests
  - Comparing means and variances of data sets
  - Comparing multiple data sets using analysis of variance
- Applications of statistics in quality assurance
  - Constructing and interpreting control charts

Who should attend

This course will be of interest to anyone involved with biofilm analysis and control, who wants to learn more about how to carry out effective data analysis and interpretation.

About the Biofilm Alliance

The Biofilm Alliance is an Innovate UK-funded network dedicated to bringing biofilms to regulatory attention. Led by four partner organisations - the National Biofilms Innovation Centre, Manchester Metropolitan University, Industrial Microbiological Services Limited, and Swansea University - the Biofilm Alliance unites experts from academia, industry, metrology, regulatory agencies, and standards organisations. Its mission is to bridge the gap between cutting-edge research and effective regulation, fostering collaboration and driving innovation in biofilm mitigation and control technologies. The Biofilm Alliance focuses on four key sectors: industrial processes, water systems, food, and the built environment.

About the training provider

The National Measurement Laboratory (NML), hosted at LGC, delivers underpinning chemical and biological measurement science for the UK and forms part of the UK's National Measurement System (NMS). The NML is the Designated Institute for chemical and biological measurement and supports the work of the Government Chemist, a unique statutory function that provides expert opinion and advice to government. The NML has over 25 years' experience of developing and delivering training to support laboratories in ensuring the quality of their measurement data.

How to register

- Register for **BOTH** modules using the links or QR codes below. Module 1 starts at 9:30 GMT; Module 2 starts at 13:30 GMT.

- Click here or   for Module 1   Click here or   for Module 2

Contact training@lgcgroup.com if you have any questions about the course.