SQT

TRAINING THAT DEVELOPS
REAL CAPABILITY

Estimation of Measurement Uncertainty for Testing Laboratories in the Food Sector

FS040

Estimation of Measurement Uncertainty for Testing Laboratories in the Food Sector

Testing Laboratories within the Food Sector are experiencing a renewed focus on their **Estimation of Measurement Uncertainty** for tests within their scope of accreditation. There are new requirements within **ISO 17025:2017** for reporting of Statements of Conformity to laboratory clients. The Decision Rules used to determine conformity have to be agreed with the client. It is not possible to know the level of risk nor to make a statement of conformance if the measurement uncertainty has not been calculated. The LabCred Accreditation and CLAS Accreditation requirements align with the updated requirements in ISO17025:2017, with the purpose of providing confidence in the results reported.

"How certain are you of the measurements in your test report? How well does the result represent the value of the quantity being measured?"

This course explains the concept of measurement uncertainty and describes the two main approaches for estimation of uncertainty for testing laboratories in the food sector. It is suitable for those who have previously calculated measurement uncertainty or are at the early stages in this process.

The aim of this programme is to provide delegates an introduction to the tools and knowledge they need to;
a) Select an approach for measurement of uncertainty of their test.
b) Calculate and combine uncertainties.
c) Report uncertainty in their test reports.
d) Comprehend the relationship between measurement uncertainty, decision rules and statements of conformance.

Duration & Price

Duration: 2 days
Delivery mode: This programme is available In-Company

Dates & Locations

In-Company training programmes are customised for your organisations specific needs. Most In-Company training is now delivered virtually.

In-Company Training

Please contact us for more information on our In-Company training options

What's covered?

This course will cover;

• The concept of measurement uncertainty.

• Sources of uncertainty within the test laboratory.

• The statistical techniques for calculation of uncertainty.

• An overview of the various approaches for estimation of measurement uncertainty. The course will focus on the following approaches:

Use of Single Lab Validation & QC data (ideally the lab can utilise existing data for estimation of measurement uncertainty)

Experimental data from Reproducibility Replicates using approach outlined ISO19036:2019 (microbial counts in the food chain). Micro presents unique challenges as the measurand is a living organism and the approach outlined in ISO19036 recognises this.

How to update contract review forms to include agreement with clients on decision rules and statements of conformity

How to report uncertainty and statements of conformity in test reports.

How to interpret and trend external proficiency test results.

Completion of a Gap analysis checksheet which encourages delegates to consider the requirements of ISO17025:2017 and is a useful basis for an action plan.

The training programme is interactive and applies different training methods and styles to deliver the key messages effectively e.g. discussions, group activities and demonstrations. The training includes practical exercises using Microsoft Excel enabling the delegate to verify their knowledge and skills.

The Tutor is experienced in auditing against the ISO17025:2017 and in supporting laboratories with uncertainty calculations and will share experiences on expectations and outcomes by accreditation assessment bodies and laboratory clients.

Who should participate?

Anyone who requires an understanding of uncertainty of measurement and for those who want to calculate & report uncertainty of measurement for their test methods including;

• Laboratory Managers

• Supervisors

• Technicians

• Analysts

What will I learn?

Participants achieve the following learning outcomes from the programme; By the end of this training course you will be able to:

1. Understand the concept of measurement uncertainty and the specific compliance requirements with in ISO17025:2017.
2. Appreciate the sources of uncertainty within the test method.
3. Determine which of the approaches available for estimation of uncertainty is suitable for your test methods.
4. Consider the needs of your customers and update contract review forms and test reports to include determination of decision rules and compliance statements.

What are the entry requirements?

Anyone who requires a basic understanding of uncertainty of measurement and for those who want to calculate & report uncertainty of measurement for their test methods including;

- Laboratory Managers
- Supervisor
- Technicians
- Analysts
- Laboratory customers and end users of measurement data.

How do we train and support you?

In-House Courses

Course tutor will contact your organisation in advance. In-house courses can be customised to meet your organisation's specific requirements. Where appropriate, course exercises can be carried out using procedures, data etc from your organisation.

Course Manual

Delegates will receive a very comprehensive course manual.

Tutors

Anne Marie Newell
View Profile

What Our Learners Say

We believe in excellence through transparency and continuous improvement. That's why we invite all our delegates to share their experiences on CourseCheck.com, an independent platform dedicated to genuine, unfiltered feedback. Learner insights help us not only to enhance our training programmes but also empower potential learners to make informed decisions. Click on the link below to read firsthand experiences and testimonials from past learners.

Click Here

SQT TRAINING THAT DEVELOPS *REAL* CAPABILITY

SQT provide a unique combination of high quality, accredited, practical training delivered by leading industry experts and supported by the most up to date learning technology and tools

LEAN SIX SIGMA, PROCESS & PROJECT MANAGEMENT

- Lean Six Sigma
- Join our Lean Six Sigma Network
- Continual Process Improvement
- Project & Programme Management

COMPLIANCE, STANDARDS & AUDITING

- Quality
- Environment & Energy Management
- Health & Safety
- Food Safety
- Life Sciences
- Laboratory
- Integrated Management Systems

LEADERSHIP & PERSONAL DEVELOPMENT

- Leadership & Personal Development
- Train the Trainer

QQI AWARD | IEMA - APPROVED - | CompEx Part of the JTL Group | FSPCA FOOD SAFETY PREVENTIVE CONTROLS ALLIANCE | CQI IRCA APPROVED TRAINING PARTNER | Chartered Institute of Environmental Health

SQT Training Ltd. | T: +353 61 339040 | E: info@sqt-training.com
W: sqt-training.com

Please follow us on social media for relevant news, events and updates