National Measurement Institute



INTRODUCTION TO ESTIMATING MEASUREMENT UNCERTAINTY COURSE

This course will give you a clear step-by-step approach to uncertainty estimation with practical examples; you will learn techniques covering the whole process from identifying the sources of uncertainty in your measurements right through to completing the uncertainty budget.

Course Objectives

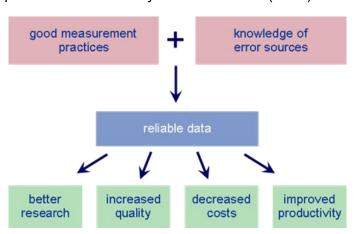
The course provides participants with knowledge and skills to:

- understand the concepts involved in the estimation of measurement uncertainty
- estimate measurement uncertainty in a practical and pragmatic manner
- apply ISO's Guide to the Expression of Uncertainty in Measurement successfully in the workplace

Course Outline

The topics covered include:

- an overview of ISO's Guide to the Expression of Uncertainty in Measurement (GUM)
- modelling a measurement
- identifying uncertainty components
- basic statistical concepts
- uncertainty calculations
- practical exercises
- useful spread sheet functions
- application in the workplace
- sensitivity coefficients
- sample calculations



Past attendees have said...

"This course gave me the confidence to prepare the measurement uncertainty calculations for our lab."

"I can now formalise the approach to our analysis and also provide up-to-date information to assist in meeting NATA requirements."

Course Details

Dates / Venue

Available dates are on our website.

Fee / Inclusions

Check the NMI website for the current pricing.

All classes include a copy of Monograph 1 - Uncertainty in Measurement: The ISO Guide.

Face-to-face classes include lunch and refreshments

Time

Face-to-face course will start at 9 am and will finish by 5 pm

Online course is delivered in 3 sessions over 2 days: 9 am - 11:30 am, 1 pm - 3:30 pm, 9 am - 12:00 pm.

Related Courses

Course name	Duration	Dates
Estimating Measurement Uncertainty for Biologists	1-day	See NMI website
Estimating Measurement Uncertainty for Chemists	1-day	See NMI website
Calibration and Measurement Fundamentals	1-day	See NMI website
Physical Metrology courses		See NMI website

In-house Options

Training may be carried out at your premises for groups of 6+ on a fee for service basis. Consultancies provide advice regarding specific measurement issues or training in advanced measurement techniques. More information is found on our <u>website</u>.

Contact Us

Phone (02) 8467 3796, or send an email to <u>training@measurement.gov.au</u>. For more information about the National Measurement Institute, visit our website.