

# Course Outline

## AZtecEnergy 2 day course

This course is run for a maximum of 6 delegates to allow sufficient 'hands-on' practice live on the SEM. Individual PCs are provided for off-line exercises

### Objectives

**On this course you will learn how to:**

- Set up appropriate analysis SEM and ED operating conditions
- Acquire spectra and correctly identify the elements
- Process spectra into quantitative analysis
- Acquire and process electron image, maps and linescans
- Store, recall, export and report data
- Write standard operating procedures
- Create tailored profiles for specific tasks
- Monitor and maintain system performance

### Pre-requisites

Delegates should have had some basic experience of using the AZtec software. This would be gained from the initial training when the system was installed.

### Course Outline

#### **Introduction to the system:**

- Hardware and detector
- Calibration and operation of X-ray detectors

#### **The Aztec user interface:**

- Using Help
- Data View, Mini View and Step Notes

#### **Image and Spectrum acquisition:**

- Microscope Control
- Acquisition pre-sets and process time
- Peak identification and diagnostic tools
- Comparing spectra and mini-quant
- Simultaneous acquisition and processing
- Practical session

#### **Quantitative analysis:**

- Requirements for accurate quant
- Pre-quantitative analysis checks
- Diagnostic tools
- Standardless analysis using default standards
- TruQ
- Practical session

#### **Images, maps and linescans:**

- Optimising image and map acquisitions
- Creating a layer image
- Autolayer
- TruMap
- Saving, exporting and printing of images and spectra
- Practical session

#### **Additional topics**

- Report templates and batch reporting
- Preferences, profiles and step notes
- Guided and Custom views
- Using two monitors

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