

Course Outline

INCA Energy 2 or 3 day course (depending on optional topics and location)

This course is run for a maximum of 6 delegates to allow sufficient 'hands-on' practice live on the SEM.

Objectives

On this course you will learn how to:

- Set up appropriate analysis SEM and ED operating conditions
- Use the tools in Inca to correctly identify peaks in the spectrum
- Process spectra into quantitative analysis using default standards
- Set up your own standards for quantitative analysis
- Acquire and process electron images and maps
- Store, recall, export and report data
- Monitor and maintain system performance

Pre-requisites

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

Course outline

Introduction to the system

Hardware and detector
Calibrating, conditioning and thermal cycling of the detector

Spectrum acquisition

Acquisition pre-sets and process time
Peak identification and diagnostic tools
Beam automation
Comparing spectra
General housekeeping of data
Practical session

Quantitative analysis

Basic theory
How the spectrum is processed
Pre-quantitative analysis checks
Quant calibration
Standardless analysis using default standards
Analysis using standards
Practical session

Imaging, smartmaps and linescans

Optimising image and smartmaps setups
Cameo+ and phasemap
Saving, exporting and printing of images and spectra
Practical session

The following optional topics may also be covered

Automated data acquisition using AutoMate
Montage for images and maps
QuantMap