

Vision for System II Instruments

This course is recommended for individuals responsible for collecting sample spectra, modeling data, and performing routine analysis of products. This course, through a combination of lecture and hands-on exercises, explores the theory of NIR, the application of theory through instrumentation, acquiring sample spectra, application of math pre-treatments and population structuring techniques available in Vision, the development of qualitative and quantitative models, and the application of those models in a routine analysis environment.

Part Number: **XT-1040**

Agenda

- Theory of NIR
- The application of NIR theory through FOSS NIRSystems instrumentation
- An overview of Vision software
- Instrument Diagnostics – routine and specialized
- Software Security including 21 CFR part 11 Compliance features
- Data Acquisition
- Viewing spectral data and file manipulations
- Chemometrics in Vision – derivatives, scatter corrections, special techniques
- Selecting the right samples – Maximum Distance, Mahalanobis Distance, random
- Identifying and Qualifying products – Correlation, Maximum Distance, Mahalanobis Distance, Residual Variance
- Developing a Calibration equation to predict constituent concentration
- Routine Analysis of samples
- Review & discussion
- Customer specific interests

Dedicated Analytical Solutions

FOSS NIRSystems, Inc.
7703 Montpelier Road
Laurel, Maryland 20723
USA

T +1-301-680-9600
F +1-301-236-0134
E info@foss-nirsystems.com