Course Duration
The duration is 2 days.

Course Goal

Student Profile
This course is specifically directed toward instrument/analyzer technicians and engineers responsible for set-up, operation, and maintenance of the ABB Inc. Multiwave Photometric Analyzer.

Prerequisites and Recommendations
Previous experience helpful but not necessary.

Description
In this course, students will learn about:

System Overview
- Explain concepts of IR/UV system and the multiwave
- Explain function of the switches and visual indicators
- Discuss communication with VWS and Vista Net

Sample System
- Liquid Versus Vapor
- Cell length and absorption

- Possible inclusion of CAC to the system

Alarms/Warnings and System Monitors
- Display and interpretation of Alarms and warnings
- Temperature displays, voltage indications, absorbents, displays and power supply checks

Basic Trouble Shooting
- Chopper Motor Sync Signal
- Detector Signal

Schematics
- Source Control Board
- Pre-Amp Board

Hardware Disassembly, clean/repair and reassembled by students
- Removal of Filter Wheel housing filter motor
- Re-sync motor/filter wheel
- Replacement of source
- Detector/pre-amp removal and replace
- Cell removal, cell window cleaning and replace
- Logic rack removal and reinstall

Calibration and Benchmark
• Zero and Span (students perform)
• Optical Calibration (discussion)

Off-line Operation
• Digital and Analog Test

Demonstrate all Set-UP Tables
• Component Tables (students practice including linearization)

• Analyzer tables (student practice)
• Factory Tables (students view with discussion)
• Review Complete Data Sheets Package
• Class Room analyzer package
• Student package if brought to class and time permits