IVI Instrument Driver Fundamentals Course

Content Overview
The course covers the types of IVI drivers, how to use them, and how to select between them. It also includes some information on the IVI Foundation and other standards we manage.

Attending this class will help you get started creating test programs to control instruments and understand how to use IVI features of IVI. Vendors interested in participating in the standards will understand how to get started working with the IVI Foundation.

Who Should Attend
The IVI Foundation Course is intended primarily for test system programmers and instrument vendors.

Length
Three hours

Outline (Note: May be altered without notice.)
1. IVI Overview

      a. The IVI Foundation
      b. The Driver Specifications
      c. Benefits and Features of IVI Drivers
2. IVI Basics (An example of using IVI)
      a. IVI Driver terminology
      b. Using the COM and C versions
      c. Functions and Attributes (in C and COM)
      d. Examples
      e. Operations common to all drivers (Inherent capabilities)
      f. Operations on groups of items (Repeated capabilities)
3. IVI Coding Patterns (Completing common tasks)
      a. Understanding the organization of a complete driver: A DMM Example b. Attributes and Configure Commands
      c. Resolving challenges of coupled parameters
      d. Predicting Identifier names: the IVI Naming Conventions
      e. Using the IVI Features: Simulation, Range Checking, State Caching, Coercion
      Recording, Interchangeability checking
      f. IVI Drivers and the underlying IO
4. Advanced Topics
      a. Components from the Foundation: IVI Shared Components
      b. Using the IVI Configuration Store
      c. Configuration Store: Using the Session Factory to open drivers
      d. Using the Configuration store to name channels and repeated capabilities