

## LabVIEW II

This course is for LabVIEW pre-intermediate users who already know LabVIEW basic and have some practices and teaches the basis on how implement and distribute your custom applications.

*Duration: 3 half-days virtual or 2 days on site*

### Main topics:

- Introduction to LabVIEW pre-intermediate, purpose and goals of the course
- Use channel wires to communicate between parallel sections of code without forcing an execution order
  - Communicating Between Parallel Loops
  - Exploring Queues
  - Transferring Data — Queues
  - Local, global, functional variables
- How to create an application that responds to user interface events using a variety of event-driven design patterns
  - Event-Driven Programming
  - User Interface Event Handler Design Pattern
  - Event-Driven State Machine Design Pattern
  - Producer/Consumer (Events) Design Pattern
  - Queued Message Handler (CMH) Design Pattern
- How to use property nodes and control references to programmatically control front panel objects
  - VI Server Architecture
  - Property Nodes and Control References
  - Invoke Nodes
- How manage configuration settings for your application by using a configuration file
  - Managing Configuration Settings
  - Managing Configuration Settings Using a Delimited File
  - Managing Configuration Settings Using an Initialization (INI) File
- How to develop strategies for handling errors in your application
  - Error Handling Overview

- Injecting Errors for Testing
- Handling Specific Errors Locally
- Creating Execution Log Files
- How to make necessary code modifications to select and build the appropriate deployment option for a LabVIEW application
  - Preparing Code for Distribution
  - Build Specifications
  - Creating and Debugging an Application
  - Creating an Installer
  - Creating a Package for Distribution