

Updated on 08/01/2025

Sign up

LabVIEW training

3 days (21 hours)

Presentation

Labview (Laboratory Virtual Instrument Engineering Workbench) is a graphical development environment used for data acquisition, instrument control and system automation.

Our beginner's course will introduce you to the basics of LabVIEW and teach you how to design interactive applications using graphical programming.

Through practical exercises and case studies, you will develop the skills needed to design, test and deploy programs that meet the needs of your projects.

Our training will take place on the latest version of LabVIEW, [LAbVIEW 2024 Q3](#).

Objectives

- Understand the fundamental concepts of graphics programming
- Create and distribute applications (.exe)
- LabVIEW programming using a common design model
- Manage inputs and outputs, files & instruments
- Acquire and analyze data in real time
- Communicate with hardware instruments via standard protocols (GPIB, RS232, USB)
- Structure and optimize your applications for high performance and modularity

Target audience

- Novice developers
- Public

Prerequisites

- Basic computer skills (file handling, software installation)

LabVIEW training program

NI acquisition equipment management

Navigating LabVIEW, presentation of the IDE

The debugger

Data grouping (tables, clusters, etc.) Software I/O

(file/instrument control) Sub-function creation

Design model - The state machine

Variables and memory accesses Main

design models Asynchronous program

Event-driven programming

Advanced error handling

Advanced interface control

Refactoring techniques

Create and distribute applications

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.