

How Can I Prepare for the Certified LabVIEW Associate Developer (CLAD) Exam?

Overview

This guide offers resources to aid a candidate in preparing for a CLAD exam. This document is by no means complete. Feedback and suggestions are welcome.

Exam Goal

The CLAD exam validates foundations and skill level to develop and maintain LabVIEW applications.

Exam Topics (Outline)

1. LabVIEW programming principles
2. LabVIEW environment
3. Data types, software constructs, and Graphical User Interface (GUI) elements
4. Variables and functions
5. Simple design patterns
6. SubVI design
7. VI design and documentation
8. Error handling
9. Debugging tools and techniques

Exam Prerequisite

None

Exam Details

1. Administered and proctored by [Pearson Vue](#)
2. 1-hour, computer-based, multiple-choice exam
3. Closed book. No LabVIEW or external resources allowed
4. Exam results are available upon completion

Exam Grading

Passing grade: 70 % or higher

NI Training / Tutorials

1. Free training materials:
 - [Online LabVIEW Basics](#)
 - [LabVIEW Introduction Course - Three Hours](#)
 - [LabVIEW Introduction Course - Six Hours](#)
2. Paid training materials:
 - [National Instruments LabVIEW Basics I](#) and [LabVIEW Basics II](#) courses:
 - Instructor-led

- Self-paced by using the course manuals
- [National Instruments LabVIEW Intermediate I](#) and [LabVIEW Intermediate II](#) courses:
- Instructor-led
- Self-paced by using the course manuals

Web Resources

- [LabVIEW Development Guidelines](#)
- Free practice [LabVIEW Fundamentals Exam](#)
- [National Instruments Academic Web](#)
- [National Instruments Developer Zone](#)
- [National Instruments LabVIEW Zone](#)
- [National Instruments LabVIEW Support](#)
- [LabVIEW Manuals Online](#) (current manuals)

Free Tutorials

- [LabVIEW Review](#) (Colorado School of Mines)
- [LabVIEW Tutorial](#) (University of Sydney)
- [LabVIEW for Dummies©](#) (Illinois Institute of Technology)
- [LabVIEW Tutorial](#) (University of Buffalo)
- [LabVIEW Tutorial Series](#) (University of Western Australia)

Additional Resources

The following table lists additional resources for specific topics:

Topic	Details of resources by topic
LabVIEW programming principles	<ul style="list-style-type: none"> • Using a Polymorphic VI to Handle Inputs of Different Data Type, Representation, and Dimension • Using Polymorphic Units
Data types, software constructs, GUI elements, and Property Nodes	<ul style="list-style-type: none"> • LabVIEW Data Storage • Handling Different LabVIEW Data Types • LabVIEW Custom Controls, Indicators, and Type Definitions • Graphs and Charts • Mechanical Action of Booleans • Loops and Structures • Formula Node Example • LabVIEW Strings, File I/O, and Property Nodes
Variables and functions	<ul style="list-style-type: none"> • Local and Global Variables • Arrays and Clusters • File I/O • Waveforms • Examples: • Controls: labview\examples\general • Express VIs: labview\examples\express
Simple design patterns	<ul style="list-style-type: none"> • Application Design Patterns: State Machines • LabVIEW Application Design Patterns

Sample Exam

[Certified LabVIEW Associate Developer \(CLAD\) Sample Exam](#)