

Sixclear Lucid LabVIEW Fundamentals Training - Course Outline

Sixclear Lucid LabVIEW Fundamentals One & Two comprises five days when delivered live in the classroom. The same curriculum is also available for unlimited access in our online, e-learning course.

Introduction

- Sixclear Philosophy
 - Course Overview
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Sixclear Lucid LabVIEW Fundamentals One

Unit 1: Getting Dirty with LabVIEW

- **Section 1:** What is LabVIEW?
- **Section 2:** Dataflow Programming
- **Section 3:** Programming Structures
- **Section 4:** Basic Data Types
- **Section 5:** Array Processing
- **Section 6:** Formula Nodes

Unit 2: Proficient Programming in LabVIEW

- **Section 1:** Modular Programming
- **Section 2:** Powerful Data Types
- **Section 3:** Charting and Graphing Data
- **Section 4:** File I/O and Error Handling
- **Section 5:** Beautiful User Interfaces

Unit 3: Application Programming in LabVIEW

- **Section 1:** Variables in LabVIEW
- **Section 2:** Core Design Patterns

Sixclear Lucid LabVIEW Fundamentals Two

Unit 1: Advanced Programming

- **Section 1:** Express VIs
- **Section 2:** Event Handling
- **Section 3:** Documentation
- **Section 4:** Advanced Data Types
- **Section 5:** Dynamic Data Types
- **Section 6:** File I/O APIs

Unit 2: Data Acquisition & Instrument Control

- **Section 1:** Data Acquisition
 - DAQ Hardware & Software
 - MAX
 - Analog Input
 - Analog Output
 - Digital I/O
- **Section 2:** Instrument Control
 - Serial
 - GPIB (IEEE 488.2)
 - Instrument Drivers

Unit 3: LabVIEW in the Real World

- **Section 1:** Standalone Applications
- **Section 2:** Application Architectures (4 sub-sections)