

LabView Syllabus

1. Introduction to LabView

- LabVIEW Environment, Front Panel & Block Diagram
- Dataflow Programming
- LabVIEW Documentation Resources
- Debugging Techniques

2. Modular Programming

- Using SubVIs, Icons and Connector Panes, creating customised icons for SubVIs
Debugging Techniques
- Creating a SubVI from Sections of a VI

3. Repetition And Loops

- While Loops
- For Loops
- Accessing Previous Loop Data using shift registers, stacked shift registers and Feedback nodes
Debugging Techniques
- Communicating among parallel while loops, passing data between two loops and synchronizing loops during run-time

4. Arrays, Clusters And Strings

- Arrays, Auto-Indexing of arrays
- Array Functions and different array operations
- Polymorphism and Polymorphic Vis
- Clusters & Cluster Functions, creating cluster, bundle and unbundle operations on Clusters
- Error Clusters to capture and merge errors while running a VI
- String Functions for formatting and manipulating strings

5. Plotting Data

- Waveform Charts
- Waveform and XY Graphs

6. Making Decisions In A VI

- Making Decisions with the Select Function
- Case Structures: of Ring Control, Enumerated Ring Control, Tab Control, Error Cases
- Timed Loops
- Formula Node, MathScript Node
- Sequence Structures and controlling VI execution flow

7. File I/O

- File I/O VIs and Functions
- High-Level File I/O Vis
- Low-Level File I/O VI and Functions
- Formatting Spreadsheet Strings

8. Customizing Vis

- Configuring the Appearance of Front Panels
- Opening SubVI Front Panels when a VI Runs
- Keyboard Shortcuts for Controls
- Editing VI Properties
- Customizing the Controls and Functions Palettes