



LabVIEW Software Design Training – On-site

Scope

The course will assume a level of competence in LabVIEW provided by attending the LabVIEW Basics II course.

The course will be an easy 2 days on-site divided into 4 sessions per day and for a maximum of 5 people. There should be plenty of time for discussion about designs and reviews of existing code.

Day 1

Session 1 Day 1 [9:00 to 10:30] - Introduction

- Brief introduction to SSDC
- Why we are here?
- The nature of software.
- What is good and bad software design?
- A typical unstructured program

Break [10:30 to 10:45]

Session 2 Day 1 [10:45 to 12:15] - Thinking about software design

- History
- Coupling
- Cohesion
- Information Hiding
- Abstraction

Lunch [12:15 to 1:15]

Session 3 Day 1 [1:15 to 2:30] – LCOD Introduction

- LCOD
- Components
- Building a component

Break [2:30 to 2:45]

Session 4 Day 1 [2:45 to 4:30] – Software Design methods demonstrated

- Coupling
- Cohesion
- Abstraction
- Information Hiding

exercise build you own component.



Day 2

Session 5 Day 2 [9:00 to 10:30] – Building Components

- Review Exercise
- Run Through a Component Build

Break [10:30 to 10:45]

Session 6 Day 2 [10:45 to 12:15] - Style

- Wiring Standards
- Front Panel Standards
- Icon and Connector Standards
- Programming Standards
- Setting up LabVIEW

Lunch [12:15 to 1:15]

Session 7 Day 2 [1:15 to 2:30] - Useful Structures and Techniques

- Variants
- Queues
- State Machines
- Events
- Tabbed Event Driven Wizard

Break [2:30 to 2:45]

Session 8 Day 2 [2:45 to 4:30 - Further process improvements

- Re-use
- Code Improvement
- Source Code Control
- Managing the software process

Questions, comments and general design consultancy.