



# Installing LabVIEW

How-To Install the LabVIEW Software

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# LabVIEW Training

Basic LabVIEW Programming and creating DAQ Applications

http://home.hit.no/~hansha/?training=labview

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#### Faculty of Technology

#### **LabVIEW Training**

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Here will we learn basic LabVIEW programming. LabVIEW is a graphical programming language created by National Instruments (www.ni.com).

This is self-paced LabVIEW training where you can watch short Videos and do Practical Exercises in your own pace.

Table of Contents:

- 1. Installation of LabVIEW
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  - 4.2 Using I/O with LabVIEW (USB-6008)
- 5. LabVIEW Test and Diploma

Additional Resources

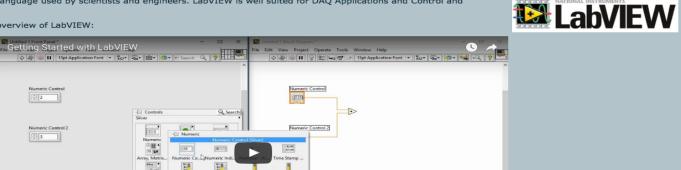
#### **Getting Started**

LabVIEW Is a graphical programming language used by scientists and engineers. LabVIEW is well suited for DAQ Applications and Control and Simulation Applications.

Ring & Enum

Vertical Fill St., 3 5 4

Watch the Video below to get a short overview of LabVIEW:













Courses **Projects** 

**Programming** 

Microsoft .NET

LabVIEW

MATLAB











#### LabVIEW Installation

#### Main Modules:

A Valid Serial Serial Number is needed - or you can use it for free in 30 days

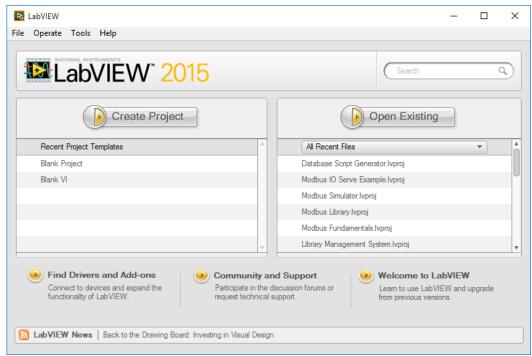
- LabVIEW
- NI-DAQmx Driver
- LabVIEW Control Design and Simulation Module
- LabVIEW MathScript Module

(Many other Modules and Toolkits exists)

#### LabVIEW

The Core LabVIEW Programming

**Environment** 



### NI-DAQmx Driver

- Used to communicate with Hardware from National Instruments, such as DAQ devices
- Examples:
  - TC-01 Thermocouple DAQ Device
  - USB-6008 DAQ Device





#### DAQmx Palette in LabVIEW

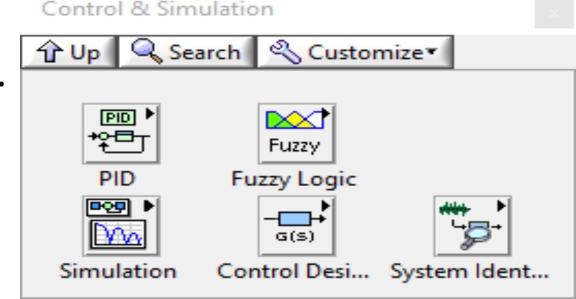
DAQmx - Data Acquisition Search Customize DAQmxDAQmxTASK ≠ CHAN + 1999 Channel Const Create Chan... Read Write Task Const Wait DAQmx DAQmx DAQm> 12311 **€ €** Start Stop Clear Timing Triggering Channel Node Timing Node Triggering N... Read Node Write Node Real-Time DAQ Assist Task Config/... Dev Config Advanced

# LabVIEW Control Design and Simulation Module

Used to Create Control and Simulation

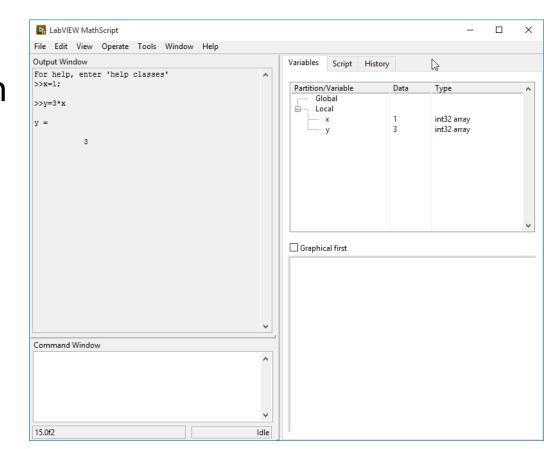
**Applications** 

• PID Control, etc.



## LabVIEW MathScript Module

- A text-based
   Programming Add-on to LabVIEW
- Similar syntax as MATLAB
- Typically used for Control Design and Simulations





Lets see how we can Download and Install LabVIEW and Additional Modules

#### LabVIEW Installation

Do you need more LabVIEW Modules?

Here you find all available LabVIEW Modules and Toolkits:

http://www.ni.com/downloads



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