

# EE 209 Lab 1 – Xilinx Intro

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## Watching the Xilinx Introductory Video

Be sure to watch the Xilinx Introductory Video on our tools webpage before moving on to the next step.

## Installation and Verification (Must complete to get credit)

Follow the instructions on installing the Xilinx tools provided on the website.

To verify your tools are installed correctly and that you understand the basic flow and operation, perform the following steps and end by showing your TA:

1. Download the tutorial **mux.v**, **mux4.v** and **mux4\_tb.v** from the website.
2. Create a new project called **xilinx\_tut** with the appropriate FPGA, simulator, and language settings
3. Rather than create new source files, simply add a copy of the three source files you just downloaded.
4. Switch to simulation view and simulate the mux4\_tb.v
5. In the ISim application, add some internal signals (like n1 and n0 of one of the individual muxes to the waveform and save the Wave Configuration file.
6. Close ISim and go back to Xilinx. In the properties of the “Simulate...” process, set the wave configuration file you just saved.
7. Ask your TA to come and check you off by performing the following actions in their presence:
  - a. Start ISIM
  - b. Show how to find the internal design signals (like n0 and n1) in the left-hand (Instances and Objects) pane of the ISim window and drag the signal to the wave window.
  - c. Show how to restart and rerun the simulation once you add a new signal to the wave window.

Student Name: \_\_\_\_\_

TA Signature: \_\_\_\_\_