
Running Vivado

We will use **Xilinx Vivado webpack** software for the Verilog coding to design, simulate and synthesize digital circuits. Vivado Design Suite is a software tool produced by Xilinx for the synthesis and analysis of Hardware Description Language (HDL) designs.

New: Run the Software Remotely on ECE Lab Computers (Linux, Mac, Windows)

1. Use any browser and go to <http://vlab.rutgers.edu>
2. Login using your **SOE account**
3. Select "**ECE**" from the menu shown on the left
4. Select one (and only one) of the available "ece*" computers you see on the screen. This will connect you to the computers in the ECE 103/105.
5. Launch a terminal window (right click and open a terminal)
6. Type

```
/home/software/Xilinx/Vivado/2021.1/bin/vivado
```
7. Vivado will launch. Alternatively, you can also launch Vivado from the desktop

Run the Software Locally on Your Own Computer (Windows/Linux)

If you have PC (Windows) or a Linux machine, Vivado webpack has free version for students, which you may want to download and run on your own computer. This is only compatible with Windows and Linux. The link for downloading the software is (look for **Vivado Design Suite - HLx Editions - 2019.2**).

<https://www.xilinx.com/support/download/index.html/content/xilinx/en/downloadNav/vivado-design-tools/2019-2.html>

Here are a few links for tutorials for installing Webpack:

<https://www.xilinx.com/video/hardware/vivado-design-suite-installation-overview.html>

https://www.xilinx.com/support/documentation/sw_manuals/xilinx2019_2/ug973-vivado-release-notes-install-license.pdf#namedDest=xDownloadingTheVivadoDesignSuiteTools

Run the Software Locally on Your Own Computer (Mac)

If you have Mac the installation process is a bit more complex as you need to go through virtual machine. We recommend to run the software remotely.

Connecting to Rutgers VPN

When you want to run the software remotely, if you run into connection problem, it might be necessary to connect to Rutgers VPN first, and then login to the remote machine. Here is the process for connecting your VPN to vpn.rutgers.edu:

1. Go to Rutgers software website and in the software categories look for VPN → click on **Cisco AnyConnect VPN**
<https://soc.rutgers.edu/vpn/>
2. Follow the instructions to download, register, and activate the VPN. (You need to sign up for [two-step login with Duo](#). It is easier if you download and install Duo app on your cell phone and add Rutgers University New Jersey on it. You will be instructed to do so during the steps in VPN registration).