

1. ELE Account:

The machines in the Computer Engineering Lab (Kelley 220) are running on Gentoo Linux with KDE (K Desktop Environment). *You must get an ELE account* to use these machines, which can be obtained from ELE System Manager in Kelley 117 (see either Tim Toolan or Will Simoneau). A storage space is granted for each ELE account designated as the folder `/u/ugrads/your_name` where *your_name* is your login name. Each account is allocated 50 megabytes of disk space on our main ELE server. You will also automatically get an ELE email account: yourname@ele.uri.edu

2. Linux:

The systems in the lab are running on Gentoo Linux. On the login screen you may change the desktop environment by clicking on “Session” on the top right corner of the screen. You should use KDE3.5 as your desktop environment. The main program, Quartus II, does not work well with other desktop environment; the program will regularly crash!

3. Computer Engineering Laboratory (Kelley 220):

Your student ID will enable you to access the laboratory via the electronic lock. Verify that your student ID can open the door. See Mr. Tim Toolan if you have problem. The laboratory is opened to students, first come first serve, except for the scheduled laboratory hours (TuWeTh 2-4:45).

4. Altera Quartus II:

The main EDA software for this class is Altera’s Quartus II. Altera offers a free “*Web Edition*” of Quartus II, which can be run on a Window PC. Visit Altera’s website at <http://www.altera.com/products/software/quartus-ii/web-edition/qts-we-index.html> for downloading details. You may install this software on your home PC or your laptop and bring your laptop to the lab. There is no compatibility problem with this Web Edition and the official version we have in the laboratory.

5. Altera DE2 FPGA board:

Altera’s DE2 FPGA board runs on its own power via a power adapter. It is connected to the Linux PC via a USB cable. This cable is for downloading the design configuration information to the FPGA. Once your design is programmed on the FPGA, this cable is no longer needed. The programming of FPGA is via JTAG (Joint Test Action Group) port on the FPGA. On the Linux side, a JTAG server must be running. You may find more information on the DE2 board at

<http://www.altera.com/education/univ/materials/boards/unv-de2-board.html>

You may also download the DE2 CD-ROM on this page. It contains all technical information of DE2 and some tutorials and design examples.