

## **Computer Requirements**

All engineering students are required to have a laptop computer meeting the specifications found on ECU's PirateTechs website: <a href="https://itcs.ecu.edu/student-computer-requirements/">https://itcs.ecu.edu/student-computer-requirements/</a>. For Engineering, a Windows PC with support for OpenGL (Open Graphics Library) graphics is highly recommended. It is sometimes difficult to determine support for Open GL in computer ads, but most newer computers will work fine. We recommend getting at least 4 Gb RAM, as we have found that additional RAM is more important than processor speed in a computer's performance with graphics-intensive applications.

We do not require a specific brand of computer but strongly advise students to consider purchasing a Dell or Lenovo computer through ECU's Dowdy Student Stores. There are several advantages of buying your computer at ECU. Repair work, including warranty repairs, can be done on-site, with loaner computers available. The Dell and Lenovo computers which have been chosen are reliable and well-built, and the prices include a three-year warranty and three-year accidental damage coverage. When comparing prices, be sure to consider the warranty and damage protection coverage and consider the inconvenience of having to return a computer to the manufacturer for warranty service.

While some students prefer to purchase Apple computers, most Engineering employers will use PCs, so it is to YOUR benefit to be familiar with a PC upon graduation. Also, please be aware that most engineering programs (in particular SolidWorks) can run ONLY on Windows operating systems. Therefore, students with Apple computers are required to download a Windows OS (available for free as a student) and install it so that the computer can be booted with either the Mac or Windows OS (note that using an emulator is NOT the same as the dual boot capability.). We recommend Apple computers only for students who are extremely computer-savvy, as all engineering faculty use Windows computers and are therefore limited in the assistance that we can provide to Apple users. If you choose to purchase an Apple laptop and run into problems, the Engineering faculty may not be able to help you.

When buying your computer, remember to get a padded carrying case (you will be taking your computer to classes often) and an inexpensive USB mouse. Consider getting a printer; you can probably share one with your roommate.

Regarding software requirements, there are a number of packages students will be required to have, but almost all are available at no cost to ECU students through a central software portal. Some of the required packages that are available at no cost include: WinMicrosoft Office suite, MATLAB (a powerful mathematics and graphing program) and SolidWorks (an Engineering graphics program). The bottom line is don't buy any software unless directed to do so by a faculty member for a class!

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