Technology Requirements for All Engineering Majors

Laptop

Each student is required to have a working laptop capable of running engineering software (provided by the university) such as AutoDesk Inventor, PSpice, and software compilers. Therefore we have established the following minimum requirements:

1. Operating system: Windows 10 (64 bit) or Mac OS X
2. RAM: 8 GB (16GB recommended)
3. CPU: modern 64 bit processor such as i5 or i7 with at least two physical cores
4. Storage capacity: 400 GB
5. Connectivity: 2x USB2 and 1000Base-T ethernet (adaptor OK)
6. WiFi (IEEE 802.11) capable
7. Graphics card needs to support at least one external display via HDMI (preferred) or VGA (adaptor OK) to be able to use the projectors for presentations.
8. Bluetooth (optional)

Note that these requirements can change without notice (but within reason) due to changes in the system requirements from the vendors of the engineering software.

Calculator

Calculators are often allowed on Engineering exams and are definitely needed for completing homework. The calculator needs to be able to graph functions, use complex numbers, and solve linear systems of equations. It is also helpful if the calculator has a computer algebra system (CAS). One of the following (or equivalent) is required:

1. TI-83
2. TI-84
3. TI-89 (recommended)
4. TI-Nspire CX CAS

Note that none of these calculators are currently allowed on the NCEES Fundamentals of Engineering exam.