

# **BCoE Computer Requirements: 2013-2014**

## **Minimum Configuration for Bagley College of Engineering Student Computers 2013-2014 Academic Year (Class of 2018)**

### **Minimum Hardware Specifications:**

Platform: Laptop or Notebook. Tablet PCs are discouraged for school work. Our faculty has found them to not be rugged enough for the rigors of backpacks and school activities.

Intel Core i5 processor or equivalent (6 Gb RAM)

250 GB Hard drive

Video screen with resolution of 1600 x 900 is encouraged (higher resolution strongly encouraged)

DirectX Compatible Video Card with 512 Mb RAM (1 Gb RAM encouraged for longer usability in graphics intensive fields such as computer science)

IEEE 802.11g wireless capability (802.11n is encouraged)

Ethernet (network) card

1 Gb minimum USB Flash Drive (thumb drive, memory stick, etc.) to allow easy transfer of files between computers.

### **Required Operating System (OS):**

Either Microsoft Windows 7 Professional or Windows 8 Professional, 32-bit or 64-bit as to your preference. A 64-bit OS allows you to have a PC with more than 4 GB of system memory, which may be preferable for faster system response if you have several applications open simultaneously.

### **Required Software:**

All students will need access to Microsoft Office to include Word, Excel, and PowerPoint. Students in Industrial and Systems Engineering students will also need to have Microsoft Access. There are several ways for students to obtain these programs. They can:

#### *Purchase—*

Office 2013 Home and Student

\$140 – perpetual license

Word, Excel, PowerPoint, OneNote

(Note: Not acceptable for Industrial and Systems Engineering students)

#### *Or subscribe to—*

Office 365

\$80 – 4 year subscription

Word, Excel, PowerPoint, OneNote, Outlook, Publisher, Access. Licensed to install on two PCs

(Note: this is the only option for Industrial and Systems Engineering Students)

Students will also need to have access to email. They can do this through a web interface or they can obtain an email client of their choosing such as Outlook.

Sophos Antivirus is available to students free of charge on the [university intranet](#) once they arrive on campus and should be installed as soon as possible. You may use another antivirus program but antivirus software is required

### **Recommended Optional Equipment:**

Students are strongly encouraged to purchase an external, portable hard drive which can be used for computer back-ups and storage of large files. These are reasonably priced and available in various capacities. We cannot over-emphasize the importance of performing regular backups of important documents and keeping your backup in a separate location from your laptop. Should your laptop be lost or

damaged, you will still have your important documents on your portable hard drive which could then be used on another computer until yours is replaced or repaired. Lost or damaged laptops are not acceptable excuses for missing assignments.

**Use Of Macs:**

Some of the software used in engineering is incompatible with the Apple Macintosh Operating System and Mac versions of the software are not available. Should a student choose to use a Mac they will need to ensure it has the appropriate microprocessor, will need to purchase the Windows 7 Professional Operating System, and additional versions of any software they wish to operate in both Mac and Windows 7 operating systems. Due to the additional costs involved, the lack of Mac support in the college, and the potential for software incompatibilities, we DO NOT recommend the use of Macs. Students who choose to purchase one should have no expectation of support and will assume full responsibility for ensuring they are compatible with Windows 7 counterparts. We are also unable to provide any recommendations on the purchase of Macs.

**Suggested Vendor**

The Bagley College of Engineering has a purchase agreement with Dell, Inc. (link on the right). You are not required to purchase a Dell but we do recommend that you only buy from a well-known, reputable computer vendor. Our experience has shown that a quality laptop, even though it may cost a little more than others, is well worth the price in reduced aggravation and fewer problems. We have also specified a computer for an engineering student, not for a typical consumer. Therefore we do not expect these computers to necessarily be off-the-shelf items in a department store (although you may be able to find some).