

# **BCoE Computer Requirements: 2012-2013**

## **Minimum Configuration for Bagley College of Engineering Student Computers 2012-2013 Academic Year (Class of 2016)**

These specifications are only for freshmen entering school during the fall 2012 semester. Transfer students should follow the specifications in place at the time they were freshmen.

### **Notes on Purchase of a Laptop**

The information provided below is sufficient for you to purchase a laptop. We are not able to review individual systems, provide any more guidance on suggested vendors, or tell whether or not a specific model will work. If it meets or exceeds the specifications below, then it should work as far as we can tell. Also, please note the recommendation against purchasing Macs for engineering work. This is not bias but is based on experience. If you chose to ignore our recommendations then you do so at your own risk.

### **Minimum Hardware Specifications:**

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

Core i3 processor or equivalent. (Disciplines involving heavy visualization should consider a Core i5 or Core i7 and faster processor speeds) 3 Gb RAM (4 Gb RAM is recommended)

250 GB Hard drive

DVD-RW required

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

DirectX Compatible Video Card with 256 Mb RAM (512 Mb RAM encouraged for longer usability in graphics intensive fields)

IEEE 802.11g wireless capability

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:**

Windows 7 Professional, 64 bit. Windows 7 Professional is required for needed domain compatibility, encryption, and XP mode.

### **Required Software:**

Microsoft Office University 2010 to include Word, Excel, PowerPoint, Access and Outlook. Microsoft Works is NOT an acceptable substitute. Microsoft Office University 2010 is available to students through Mississippi State Bookstore at [www.msstate.bncollege.com](http://www.msstate.bncollege.com). There is no less expensive way of obtaining this software than through the bookstore.

Sophos Antivirus is available to students free of charge on the university intranet ([http://www.its.msstate.edu/Services/Software/index.php?party\\_id=49](http://www.its.msstate.edu/Services/Software/index.php?party_id=49)) 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).