Design
Computer/Software Requirements

B.F.A. Specialization in Communication Design & Industrial Design

Southern Illinois University Carbondale
School of Art and Design
Note:
The prices herein are rounded estimates, based on prices at the date of preparation.
TABLE OF CONTENTS:

1. **POLICY:**
   - Who has to have computers
   - Policy rationale

**GENERAL REQUIREMENTS**
- What is required and why

2. **HARDWARE OPTIONS**
   - Computers and options
   - Legacy hardware

**SOFTWARE OPTIONS**
- General software
- Requirements and recommendations

3. **RECOMMENDED HARDWARE/SOFTWARE**
   - Drive backup
   - Drive Repair
   - Font management

4. **PURCHASING AND PRICING**
   - Where to buy
Who has to have computers?
Everyone enrolled in the design specializations—including transfers—who have completed portfolio assessment and wish to take courses at the 300 level or greater are required to have hardware and software as specified below.

▶ Industrial Design students who pass the required ID specialization entry portfolio assessment, held at the end of the Fall semester, must have the required hardware/software before the start of the Spring semester 200 and 300 level course.
▶ Hardware requirements are the same for all classes.
▶ Software requirements vary from class to class, but all options are listed in this pamphlet. Individual class requirements are posted on the school web site and are available from the Academic Advisor of the School of Art and Design.
▶ Students without the required equipment for a class are not allowed to take that class.

School of Art and Design maintains a computer lab in Quigley Hall 110 for use by students in foundation and higher level courses.

Rationale:
1. Students with their own computers are not tied to labs, their hours of use, and maintenance and usage limitations.
2. For example students with their own laptop do not need to remove all files from lab computers at the end of each session.
3. Computer software is deeply discounted to students, and upon graduation, you will have tools necessary to continue your career.
4. Current course fees will continue to provide support to improve the equipment the school provides, including printers, scanners, digital cameras, and interactive pen/displays.

The specified laptops are a lasting investments. Macintosh computers are the industry standard in Communication Design and frequently used in multimedia.

They are also universal; they can run software under MAC OS, Windows, and Linux. The required software is also industry standard for professional use. Software purchased as students can later be used and upgraded as if it had been purchased at full price.
GENERAL REQUIREMENTS

1. A) Communication Design Students must use Macintosh laptop computers. Windows based PC’s are not allowed.

B) Industrial Design students may decide between a MacBook Pro and a specified PC Laptop. The requirements are explained in the hardware section.

Desktop machines are not allowed.

2. Software must be legally purchased and licensed to the student using it. No copied or pirated software.

3. Software must be the version number that is for sale on the beginning date of the first classes taken under this agreement, e.g. when actually entering classes as a student in design specialization. You will not be required to upgrade thereafter with the exception of Solidworks which will require a yearly renewal.

HARDWARE OPTIONS

Communication Design requirements:
As of publication date, all Apple MacBook Pro configurations meet the minimal Communication Design requirements listed below.

MacBook Pro: 2.5 — 2.9 GHz processor
4 GB or more RAM (more is better)
About $2,000 to $3,500 depending on configuration.

Recommendation:
Insurance—AppleCare or an equivalent—is recommended.
► Check the fine print to be sure of what is covered.
► Check to see if the TechTool application is included in AppleCare. Inclusion saves the cost of a separate purchase ($100).

The ID specialization equipment requirements:
The Industrial Design student’s hardware options are based upon the requirements of specific software, industry standards, position requirements, and enhanced productivity.

These options will allow students to meet industry standards and improve their ability to create and render CAD models.
Industrial Design students are required to purchase SolidWorks as their main CAD software. This software is only PC compatible and requires a Windows operating system. It can be ran on a Mac via Bootcamp, Parallels, or Fusion (preferred Mac option).

The advantage to using a MacBook Pro is the access to software, better virus protection, and an interface that is geared more toward the creativity community. The Mac OS and computers are the industry standard in the visual communication industry.

The main disadvantage of the current MacBook Pro product offering is the reduction in performance for CAD modeling and rendering. The modeling and rendering software do not support the current MacBook Pro graphic processor unit (GPU) options, although the software will run on these machines. It has been determined that the GPU options are insufficient when compared to the specified PC laptop options.

**ID Hardware options:**

**Option 1**

**MacBook Pro:** 2.7 GHz quad-core Intel i7 processor, 8GB RAM or larger, 1GB or larger graphic processor, minimum 500 GB hard drive. Price: $3200

**Option 2**

**PC laptop:**

2.8 GHz (or greater) quad-core Intel i7 processor, 8GB RAM or larger, 2GB or larger graphic processor (i.e. Nvidia Quadro K2000M), minimum 500 GB hard drive. Price: $2500

**Other equipment**

Digitizing Tablet to be used with sketching and design software (see software section).

All Industrial Design students are required to purchase a tablet. It is recommended for Communication Design majors but not required.

Suggestions: Select a model with at least an active area of 4×6, or larger.

**Minimum:**

Wacom Bamboo Create—Approx 8.5"×5.4" active tablet area. While a larger active area than Intuos 5 small, Bamboo has limited sensitivity, pen pressures, and pen replacement options. ......... $199

**Recommended:**

Intuos 5 small (6"×4") .......... $229

**Better:**

Intuos 5 med wireless (8.8"×5.5") .. $389
SOFTWARE OPTIONS

Required software is of two types: design/graphics/media software and basic text/communications “office” software.

Software required for ALL Design students

Graphics, web, multimedia software:
The Design program uses applications that Adobe sells individually, in “suites” or collections, or via the Adobe Creative Cloud. **Suites are a much less expensive way to purchase applications.**

Required graphics software:
- InDesign CS6, Photoshop CS6, Illustrator CS6, Acrobat XI Pro,

Required web software:
- Dreamweaver CS6, Photoshop CS6, Acrobat CS6, Illustrator CS6, Flash CS6

Recommended for Web/Multimedia:
- AfterEffects CS6, Soundbooth CS6, Premiere CS6, Flash CS6

Minimum for design and web classes:
CS6 Design and Web Premium Suite . $450
Contains all required applications for graphics/web

Recommended:
CS6 Master Collection . $799
If you want to work seriously with web, video and/or sound (multimedia), the CS6 Master Collection includes all applications needed for graphics, web and video/multimedia.

Security/Antivirus software:
Mac users should install Sophos or similar software.
PC users should install Microsoft Security Essentials or similar software.

“Office” software:
The four alternatives listed below, all provide compatible word processors: the most important component. They all offer presentation software (“Power Point,” “Keynote”) of roughly comparable quality.

All four alternatives, including NeoOffice and OpenOffice (the free ones) are fully professional and competent.
NeoOffice is the Mac variant of OpenOffice, which was designed by Sun Microsystems and distributed as non-proprietary, open source software.

Choose one based upon you OS:
Microsoft Office (for PC or Mac) . . . . . $100.
(2010-PC or 2011-Mac - University edition)
(Industry standard)

Apple iWorks 2009 . . . . . . . . . . . about $80
(includes: Pages, Keynote, and Numbers)

NeoOffice (for Mac OS) . . . . . . . . . Free
(www.neooffice.org)

Open Office (for PC OS) . . . . . . . . . Free
(www.openoffice.org)
Software required ONLY for Industrial Design students
ID specialization requires prior listed software and software listed below.

PC operating system:
Microsoft 7 or 8 OS (64 bit) $70 to $90

For Mac laptops, select one of the dual boot options listed below.

VMware Fusion 5 (Preferred) $50
BootCamp Free with Mac OS

3D Modeling and rendering software:
SolidWorks $150
Basic student version from SolidWorks. Additional discounts may be available online. Note: This product will require a yearly renewal.

AutoDesk SketchBook Designer (newest version) Free
Requires AutoDesk account activation, http://students.autodesk.com

KeyShot (recommended, not required) $95

**RECOMMENDED HARDWARE/SOFTWARE** (not required)

Back-up:
It is always possible to lose your work: all of it; perhaps everything you have done! We see it happen. You are wise to “backup”—make copies of your computer drive—regularly. Good, regular backups save your work and even enable you to use your computer without interruption after a drive fails.

Back-up Drive:
Pick a backup drive (external hard drive) the size of the drive in your computer or greater with either Thunderbolt connection (Mac) or USB3 (PC).

An external drive that will backup the entire contents of your notebook drive can be purchased for around $100.00.

Back-up software:
Two applications below make backups easy, perhaps, even on a schedule. Both make “bootable” backups. You can restart your computer on the backup drives with all of your software and data intact, at least up to the last backup.

CarbonCopyCloner Free/$39 www.bombich.com
SuperDuper Free/$30 www.shirt-pocket.com

(continued on the next page)
**Maintenance/repair software:**
Computers rarely break. Usually, the problem is corrupted files on the hard drive.

**Drive maintenance and repair are important for keeping your computer running and not losing your work.**

Tech Tool ......................... $100  
(may be included in AppleCare)  
www.micromat.com

Disk Warrior....................... $99  
www.alsoft.com

**Font Management:**
A font manager will turn fonts off and on as you need them, avoiding really long font menus and other problems.

Linotype Font Explorer ............ Free  
www.linotype.com

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**PURCHASING AND PRICING**

Apple computers can be purchased at educational prices at the SIU computer store or Apple Store for Education. When shopping, compare prices and packages. Some packages come with free printers or other ancillary items you may find useful.

**SIU Computer Store:**
Apple store for education at SIU:  
http://www.infotech.siu.edu/apple/  
or www.apple.com

Follow tabs to

- store
- education store
- college or university student
- Identify Southern Illinois University as your school
- Sign-in to the store.
- Each site will require documentation of proof of student/university status.

University Bookstore URL:  
www.siu.bkstr.com

**Academic Software Vendors:**
www.cdwg.com  
www.academicsuperstore.com  
www.journeyed.com  
www.academicsoftwareusa.com

“Google” for other stores.
OVERVIEW

Communications Design
After completing several of the 200 level design core classes and pending the outcome of the required portfolio review in the Communication Design specialization, those enrolling in 300 or 400 level courses in the program must have the required hardware and software.

Industrial Design
Pending the outcome of the required portfolio assessment in the Industrial Design specialization and before the start of the second (Spring) semester 200 ID courses, it is required to have the outlined hardware and software.

You will not be allowed to take classes without the required hardware and software.

Only the MacBook Pro is allowed for Communication Design and dual ID/Comm majors.

Required software includes basic office software and Adobe Creative Suite applications for graphics and web. For ID specialization additional hardware and software are required.

We strongly recommend:
- Extended warranty or insurance
- Backup drive
- Drive repair software
- Font management software

Sources for hardware and software are listed at academic discount prices.