The School of Design requires that each incoming Design student own a laptop with graphics capabilities, and that they be prepared to purchase the software programs used in courses.

Students should budget for the purchase of the necessary hardware and software the way they would books and other supplies for class. *Educational purchase discounts for both hardware and software are available at the SFSU student store, and through various online vendors.*

It is best to begin the program with a good graphics computer that can support demanding software such as Adobe Creative Cloud and/or SolidWorks, but you may be able to hold out until your second semester in the program with a laptop that can handle still images and presentation applications. Below are details of the hardware and software requirements for all Vis Com students.

Minimum Hardware Requirements for BSVCD Majors:

A MacBook Pro (Retina display or the NVIDIA graphics card) is recommended for this major because the Apple OS and hardware are the standard in the visual communication design / graphic design industry.

Note: The Microsoft Surface is not a laptop. Please do not purchase a Surface hoping it has the graphics cards and processing capabilities to run graphics software The Surface cannot run our required software. We recommend you purchase a MacBook Pro.

- **Processor:** Multicore Intel processor with 64-bit support. Minimum 2.3GHz dual-core Intel Core i5 or 2.2GHz dual-core Intel Core i7 processor.
- Operating System (either one of the following):
 - O Apple: Mac OS X versions 10.12, 10.13, 10.14
 - o PC: Windows 10 (64-bit)
- Memory: Minimum of 8GB of RAM (random access memory) recommended (note: After Effects requires 16 GB RAM). We recommend you get as much RAM as you can.
- **Storage:** 500GB+ 7200RPM hard disk or 256GB+ solid-state drive (SSD). SSD will significantly improve performance.
- **Graphics:** A MacBook Pro with Retina Display and at least 4GB of VRAM will provide suitable performance.
- **Size/Display:** 15" display with at least 1600 x 900 resolution and ideally higher. Note: A 13" laptop could work if the student has a larger display at home with a standalone full-size keyboard for more complex and detailed projects. A high-resolution laptop display (15") is still recommended (especially for use with prototyping and motion graphics software in classes).
- A 2-button mouse is required at a minimum (trackpads on the laptop are neither accurate or
 ergonomic). Alternately, students may use a tablet (such as Wacom), or an external trackpad if they
 prefer.
- Backup Capability: An online ("cloud") provider will let you back up your course work (important!) and share it to others easily. All students have a free Box account: https://sfsu.app.box.com/. This is a safe and secure way to Other options include Windows' built-in OneDrive, or third-party Google Drive,

<u>box.com</u>, or <u>Dropbox</u>. If possible, an external drive as secondary backup (La Cie or Seagate are good brands) is a good idea as well. See <u>"3-2-1 Backup Strategy"</u> for more information.

Strategic Extras:

- **Pocket USB flash drive** for exchanging files with others, loading files onto printers and presenting work. Note: these are not stable enough to function as backup drives.
- Spare AC Adaptor to leave at home (most frequently seen object in our lost and found)
- Extended Warranty such as Apple Care
- Second Display Screen for work at home
- Insurance policy coverage for your laptop added to your home or renter's insurance.
- **Laptop security cable** to tether your machine wherever you are working at school, assuming laptop has a Kensington-type security slot.
- External battery or power pack (10000-20000 mAh) for charging laptops and smartphones.

Software:

Required for All Design Majors:

Basic Productivity Applications:

All students will need applications that perform word processing, presentation/slideshow, spreadsheet, etc. This functionality can be achieved through a traditional software package like **Microsoft Office**, **Apple iWork**, or through cloud-based software like **Google Docs**. Access deep discounts through <u>SFSU IT Services</u>.

Design Specific Applications:

All students, whether using an Apple or Windows computer, will need the following Adobe applications: Photoshop, Illustrator, InDesign, and Acrobat Pro.

Registered students in the School of Design can get free Adobe Creative Cloud licenses. This is for declared Majors and Minors only. The process for accessing Adobe software for installation on personally-owned computers is https://athelp.sfsu.edu/hc/en-us/articles/360034974694-How-to-install-Adobe-applications-on-personal-machines. Please log in with your SFSU credentials and you should then have immediate access to the creative cloud programs.

If you are already using your SFSU credentials/email for your current CC account, please go to the support systems below to the free software. If when you login the system does not recognize you, please send your name, ID number, and registration status (Major or Minor) to design@sfsu.edu.

For problems and support with accessing the Adobe software, students can call 415-405-5555, or email service@sfsu.edu. Please note that SFSU IT support is limited to troubleshooting access to the Adobe software or access to the Adobe Creative Cloud portal. SFSU IT cannot provide support or training for the use of the Adobe titles or support student computers themselves.

Adobe Software, continued

When students graduate or leave the University, they will lose access to the SFSU Adobe Creative Cloud license. To migrate their content that they may have stored in the Adobe Creative Cloud to a personal account, students will need to request assistance migrating their data. For now, this can be done by emailing service@sfsu.edu and a member of the AT Desktop Service will assist them.

Additional Applications:

Some advanced or special topic courses require additional software which may be made available to students in the course through an educational license, which may be purchased just before taking the class, or which is open-source and free. Information about accessing specific programs will be provided in these classes' syllabi.

Software Required for Visual Communication Design:

The BSVCD program requires courses in graphic design as well as interactive and prototyping design, motion graphics (producing large digital video/sound files), etc.

- Most of the software used in the BSVCD program is found in the Adobe Creative Cloud suite including Photoshop, Illustrator, InDesign, Acrobat Pro, XD, After Effects, Edge Animator, Premiere, etc. Students will also use:
- Unity Development Platform (available free)
- Students also use prototyping software such as Figma (free), InVision Studio and Sketch (we have reduced-fee and free licenses available for students your instructors will help you with these).

Most of the software needed will run fine on either Windows or Mac platforms assuming you have met the basic system requirements of the Adobe Creative Suite programs and have graphics hardware that is in line with our basic recommendations. Adobe After Effects is the most challenging for the GPU, CPU, and RAM.

NOTE: some of the most widely used user prototyping, font authoring and surface-prototyping software only run on Macs.

Where to Purchase Student Priced Software:

- https://sfsu.onthehub.com. Always make sure that you are obtaining student pricing for the applications that you purchase and be ready to provide documentation supporting your student status. Your faculty can help you obtain all available discounts.
- Adobe Creative Cloud: See information above about the Free License for Design majors and minors.
- Companies will have student pricing on their sites. Please work with your faculty to ensure you are getting the best price.

In addition to the skill-development classes that teach them, core product design studio classes will require the use of these applications. Other courses may require additional special-purpose applications which are usually free/open-source and available for Mac and Windows.