F.A.Q.

Should I buy a computer?

In the time you are here at the GSAPP you will have nearly unlimited access to computers and a 1-to-1 student to computer ratio for your last 2 years (MArch students work in pairs for the first year and AAD and UD students have this ratio for all 3 semesters.)

We buy high quality workstations and they are available to you 24 hours a day and 7 days a week. In general we don’t recommend that you buy a computer for 2 reasons:

- You will need to spend a significant amount of money to buy your own legal copies of the software that we provide in the labs.

- You will have a computer at your desk for the entire time you are here. If you buy a computer, by the time you are graduating that computer will be ‘outdated.’ Technology moves so quickly that we recommend that you buy a machine as close as possible to the time you will graduate as this is when you will no longer have access to GSAPP computers and will ensure that you get the latest technology while you can still take advantage of the available educational discounts.

What kinds of hardware discounts are available to students?

There are numerous discounts available for students at Columbia. You can find specific information on Apple, Dell and other brand hardware here:

http://www.columbia.edu/acis/sales/

What about Software?

In general you can find discounts on software at sites such as www.journeyed.com or www.studica.com. However, we are working with a few of our vendors to try to make accessible packages of software suited to the needs of GSAPP students. We have one such deal in place with Adobe and you can access your GSAPP specific catalog and pricing by going here: www.govconnection.com/columbiaadobe. Once you register on the site you can order Adobe products (Creative Suite Premiere, After Effects, etc.) at a rate substantially discounted from the standard student rate. You can also download student versions of all Autodesk (AutoCAD, 3ds Max, etc.) from http://students.autodesk.com/. We also have licensing for Microsoft Office so please contact John Ramahlo (john@arch.columbia.edu)
What about installing software on the studio computers?

Generally, we will not install any additional software on the studio computers during the course of the semester. If we receive a request for specific software from a professor during the semester for his/her studio we will consider installing it. However, under no conditions will we install beta versions of any software.

How often should I make backups of my work?

You have to ask yourself “Do you feel lucky?” The reality of the situation is that data loss happens every day. Hard drives are complex devices with high-speed moving parts and failures do happen. With that in mind we recommend that you have a backup strategy that combines convenience, redundancy, and an understanding of what a back up means. For example, if you back up your work from the hard drive in your studio computer to another hard drive and then that hard drive fails (or you drop it, spill a coffee on it, etc.) you could lose everything on that drive. All the work from the previous semester/year would be lost. It is for this reason that we recommend hard drives as excellent sources of interim, or working, backup but can only recommend optical media for long term backup. Every machine in the labs and studios here at GSAPP has a DVD burner so you can burn your data to long lasting optical disks. The three basic devices you can use effectively for backup:

Jump/Flash Drive - They are fast and reliable and come in sizes up to 32 Gb. 1 and 2 Gb models are relatively cheap (~$10 or less). Great for daily/weekly backups of data from your E: or U: drives. The main negatives are the limited size and the ability to forget it attached to the back of a computer.

Portable Hard Drive - Hold huge amounts of data, are relatively inexpensive (~$0.50/Gb) and great for working with large video files. These are great for interim backups before you burn to DVD. Makes it easy to move to a colleague’s desk and work on the same file. The negatives are that if you drop them they can be irreparably damaged and since they have moving parts can undergo physical failures from regular use.

DVD media - Long shelf life that can hold decent amounts of data (4 Gb) and near universal format makes DVDs a great choice for long term backup. Perfect for backing up the contents of your work at ¼, mid, ¾ and final review time. DVDs can be written incrementally which allows you to use it again without deleting what you’ve already written. They are also pretty inexpensive ($10-$15 will buy you 25 discs almost
anywhere) so you can be liberal in their use. The only negative is they can be scratched and made unreadable.

**What do I do if there is a problem with my mouse or keyboard?**

Please do not swap it with a neighbor’s computer. Getting a replacement is as fast and simple as entering a ticket in our help database which can be accessed by going to [www.arch.columbia.edu/help](http://www.arch.columbia.edu/help).

**How do I report a printer that is in need of paper or toner?**

We generally leave extra paper in the labs so if the printers run out of paper in the middle of the night you can load new paper and continue printing. If you are unsure how to load the paper please ask someone to help. If there is no paper available (you can always check another lab if it is literally the middle of the night) or the printer needs new toner please put in a help request at [www.arch.columbia.edu/help](http://www.arch.columbia.edu/help) and someone will replace the toner or paper as soon as possible. We also have printing assistants checking paper and toner during the day and evening.

**How do I report more serious problems with the hardware/software?**

If your computer is not starting up, you can’t log in, or a program you need is crashing with an error you should put in a help request ticket: [www.arch.columbia.edu/help](http://www.arch.columbia.edu/help). All tickets are automatically assigned and addressed in the order that they are received, so the sooner you report the problem the sooner it will be resolved. Also, you should be sure to follow-up on your ticket (you can look it up by number in the online system) as sometimes one of our systems people will have made an update and be waiting for a response from you. If the problem is serious and they need to swap out your machine they will ask you to make a backup of any work you need from the machine, and until you tell them you have done so by responding to the updated ticket they will not proceed. Once you enter a help ticket jot down the number so that you can make reference to it in future communications regarding the problem.

**My problem is that I can’t log into my computer so how can I put in a help ticket?**

The first thing to try is to try logging into another workstation in your studio. If you can log in to that machine it will tell us that the problem is with the specific machine you are unable to log into. If you cannot login to any/another computer it tells us that the problem is with your account profile. When you enter the ticket this kind of info is very helpful and ensures that we will be able to solve the problem much faster than if we don’t
have this information. If you can’t login to any of the GSAPP computers you can enter a
ticket from any of the computers in the university’s labs or libraries, via the wireless
network, or with the help of a studio mate (who can let you create the ticket while they
are logged in).

**I didn’t make a reservation for my AV equipment in advance and I need it for class
tomorrow?**

We do not make exceptions to the 24-hour advance reservation policy. The amount of
equipment and people that need access to it do not allow for this. If you need equipment
but did not make a reservation you will need to have your professor or critic e-mail the
AV office asking for the unreserved equipment for their class. You can have them e-mail
the AV office at av@arch.columbia.edu.

**I need to capture and edit my video footage. Can the AV office help me do this?**

The AV office can offer advice, and give you a tutorial on how the camera works but you
should not rely on them for technical assistance in working with Premiere, Encore, After
Effects or the other video editing or DVD creation software. For assistance with these
applications you should first check with your professor, critic, TA, or DA. If the problem
is a technical one (and check with the above individuals first to confirm that the problem
is in fact a glitch) you should report it via the help request ticket system found at
www.arch.columbia.edu/help.

**I need to have the drivers for my camera/external hard drive added to the
workstation in my studio. How can I do this?**

Again, you need to put in a help request ticket, listing what you need added and when
you will be available to meet one of the IT staff in order for the device to be added. It is a
brief process, usually taking no more than 2 minutes but you need to have the device, any
cables and software present for the installation to occur. We try to have all the drivers on
the machines for the cameras you can check out of the AV office so you shouldn’t need
this assistance with the school’s equipment.

**I’m having trouble with my login or I don’t see the appropriate shared drives?**

Like most of the problems represented here the solution is to create a help request ticket.
Please choose the problem type as “Login Problems” so that your request can be routed
to the appropriate technician who will likely be able to resolve the issue remotely.
How should I prepare my files for the Output Shop?

*Flatten Layers:*

Flatten all of your layers before printing. This will reduce the time it takes to spool the image.

*Set your Print Boarder in Illustrator:*

Set your document setting and the printer document settings to the same size. Also make sure the print boarder (the gray box around your page) is completely outside your design.

*Keep Linked images at the same Resolution:*

Try to keep all of the imported images at the same resolution, this will allow the files to print quicker.

*Keep file sizes as small as possible:*

The smaller your file sizes are the faster it will print. Sizes should remain under 100MB. All submissions must be in .pdf format.

*Plot Images at 72 DPI only:*

You are wasting your time if you plot at higher resolutions!

If you are plotting, keep the resolution of all of your images at 72 DPI. You will not notice any difference between 72 DPI and 150 or 300 DPI on the plotters. However your files will plot very quickly if you leave it at 72 DPI.

What kinds of files do I need for the 3-D printers?

For 3-D Printing/Prototyping you can submit .stl files. If you are going to use the Z-Corp machine and you want to print a color part you will need to use the Z-edit program to paint/colorize/apply texture maps to your part. Z-edit is installed on the machines in the 202 Fayerweather lab and there are help files/instructions as well as sample parts included in the install. Once you’ve colorized your part you will need to save the file from Z-edit and submit it for printing.
What kinds of precautions can I take to ensure my 3-D model will turn out correctly?

The first thing that you need to consider is scale and support thickness. The absolute #1 problem that faces 3-D models is their necessary ability to support their own weight. You need to make sure that the support/line thickness in your design is appropriate for the weight of the material and the scale. This is especially important for models made with the z-Corp starch printer as the models need to be scooped out of the build material and then need to be waxed before they are at their full strength. It is better to err on the side of too thick than to have a model that ends up in pieces. The Output shop is not responsible for models that break due to incorrect support weight and will warn you about designs that they expect to be problematic. You are billed for models that fail due to poor design. If you are not sure if your design will work please consult the Output Shop staff for assistance.

What do I need to know about color profiles and printing?

*Plot in RGB color, unless otherwise noted:*

There is always some confusion about the differences between CMYK and RGB. In an effort to minimize the confusion about color matching we’ve re calibrated the plotters so that they will print in RGB mode (rather than their native CMYK). RGB is the same mode that your monitor displays. By working in RGB, you can ensure that your output will closely match what you see on your screen. In order to make sure that your output is consistent, the best thing that you can do is make sure that you have the same color settings in Illustrator, PhotoShop, and InDesign. To set the color preferences go to the “Edit” menu in any of the aforementioned applications and choose “Color Settings.” Choose the setting “US Prepress defaults.” If you do this for each application and save/submit your documents in RGB mode you can expect your output to be identical to the images displayed on your monitor. Check the document’s color settings in the application before printing or plotting the document.

What materials can be used with the laser cutters?

This summer we created a new Output Shop. Part of the project included a new high volume exhaust system. With this new system in place we will once again be able to allow the cutting of plex and other formerly prohibited materials. There will be a current list of the accepted materials posted at the Output Shop. If you have a material that isn’t on the list you can always ask Carlito Bayne, tito@arch.columbia.edu, so that we can either arrange for a test cut or find out the status of your material.
I really need my 3-D model tomorrow, will that be possible?

Honestly is it possible? Yes, certainly. Is it likely? Probably not. The average model takes from 2-6 hours to print but some more complex models on the ABS printer can take up to 20 or more hours. As jobs are printed as they are received you may be the next job or be queued up after 4-5 other jobs. If these other jobs take a full day in order to print you job will not even be started for a full day. Please try to plan ahead a full 48 hours for your expected 3-D output. This will give you the appropriate planning window and gives us an opportunity to provide a pleasant surprise if the model is printed sooner than anticipated.

Studio is in 1 hour and I need my plot done in time. What can I do?

In this case probably nothing. As with all jobs submitted to the Output Shop all jobs are done in the order they are received. If there are a number of plotting jobs in the queue before yours they will be printed first. Depending on the length of a plot, it can take anywhere from 5-60 minutes for a single job. If there are a few jobs before yours it may not be possible for you to have it within the hour.

I’m not sure how to use Photoshop or Autodesk Revit. What can I do?

We now have access to hundreds of software tutorials through: www.lynda.com/portal/columbia. Please login with the same uni and password you use to access your Columbia email.