

# UNDERGRADUATE STUDENT COMPUTER OWNERSHIP GUIDE

## Georgia Institute of Technology

### 2018/2019 Information

<http://www.sco.gatech.edu>

Welcome to the Georgia Institute of Technology! Georgia Tech requires all undergraduate students, including transfer students, to own a laptop computer that can be used in your residence and carried to class. This document describes minimum hardware and software requirements, support and security guidelines, and computer ownership financial aid information.

#### PURCHASING HARDWARE

Whether you choose to purchase a new computer or you already own a laptop, make sure it satisfies as many of the components listed in the “Hardware Requirements” section below as possible. To access detailed information on purchasing a laptop computer, see <http://techstuff.gatech.edu>.



#### *Life Cycle*

Ideally, a new laptop/notebook that meets the specifications in this document will continue to serve your needs for the next four years. If you are entering with a used notebook, you may need to upgrade it before you graduate, depending upon its specifications and your needs. The Technology Store @ Georgia Tech (located inside Barnes & Noble) has prepared several packages that meet or exceed the Georgia Tech hardware requirements. Please feel free to check with the Technology Store, the Office of Information Technology (OIT) Technology Support Center, or with a Wreck Techs (Residential Housing IT Support) staff member if you have specific purchasing questions (contact information is provided at the end of this document).

## HARDWARE REQUIREMENTS

Hardware needs to meet **at least the minimum standards** summarized in the table below. Students should also check with their school or department to determine if there are additional requirements for their course of study.

### *Minimum Hardware Requirements*

|                 |   |
|-----------------|---|
| Processor       | 64-bit multi-core processor (dual core or higher recommended) |
| Memory          | 8GB (or higher)   |
| Primary Storage | 128GB minimum, recommended 256GB (or higher)                  |
| Backup          | External hard drive or cloud service                          |
| Networking      | Dual-Band (2.4GHz/5GHz) Wireless 802.11ac                     |
| I/O devices     | Physical keyboard and mouse/trackpad                          |

### *Additional Recommendations*

|                      |  |
|----------------------|--|
| Recovery option      | Highly recommended   |
| Extended Warranty    | Highly recommended   |
| Optional accessories | VGA dongles, Ethernet cable, laptop anti-theft cable lock, webcam, HDMI dongle, microphone, and headphones |

The computer should be fast enough and have enough memory and disk space to provide satisfactory performance over a usable life of at least three to four years. The hardware requirements and recommendations are discussed in greater detail below:

**Form Factor:** Laptop\* with a minimum of 4 hours of battery life is required.

**Processor:** 64 bit Multi-core processor or better.\*\*

**Memory:** 8 GB or more. For best performance, we recommend that you configure/install as much memory as affordable at the time of purchase.

**Operating Systems:** Windows or macOS or Linux

**Primary Storage:** Hard drive/solid state drive with a minimum of 128GB of storage capacity.

Note: It is advisable that you get as large a drive as affordable. Check with your school/department to determine if greater storage capacity is needed.

**Backup:** For local backup, an external hard drive with at least double the size of the internal hard drive or a subscription to a cloud based backup solution like

CrashPlan or OneDrive for Business is highly recommended. (See FAQ Q23 for additional information.)

**Networking:** Dual-Band (2.4 GHz/5 GHz) Wireless 802.11ac capable

**Recovery options:** It is highly recommended that all computers include a recovery partition or recovery utility that allows quick restoration of the factory image, should a re-installation be necessary. If the system does not have a recovery partition, then students should have their software media with them in the event a re-installation is necessary. *If you have questions, check at the point of purchase or at the Technology Support Center.*

**Accessories:** Physical keyboard and mouse/trackpad.

\* Note that most tablets do not meet the minimum hardware requirements. However, if it meets all the hardware requirements and can run full desktop operating systems, a tablet is acceptable.

\*\* The use of Virtual Lab (VLab) does not diminish these requirements. Your system will still need to independently support the required software. Virtual Lab (VLab) provides GT students a way to access 'virtual machines' on campus and use software such as MATLAB and AutoCAD from any computer with Internet access. See <http://mycloud.gatech.edu> for the Citrix Access Gateway to VLab.

**Warranty:** Extended warranties (three years, in general) are highly recommended. These warranties normally cover hardware problems as well as system troubleshooting via phone or email (additional accidental damage coverage should be considered, if available).

**Third Party Resources:** The Technology Store offers in-store purchasing in addition to an online order site. Visit [techstuff.gatech.edu](http://techstuff.gatech.edu) for exclusive discount pricing for the Georgia Tech community on hardware, software and accessories. All students who have been accepted to Georgia Tech should already be assigned a GT account, which is required for access to this special pricing. To access the techstuff.gatech.edu site fully before your FASET orientation session, go to [www.passport.gatech.edu](http://www.passport.gatech.edu) to activate your GT account and set up your password.

#### **Optional Accessories:**

- Dongles for connecting to an external display or projection device
- All classrooms on campus utilize VGA as the standard connectivity option for projection systems and 3.5 mm or 1/8" jack for audio; and newer classrooms may also have DVI and/or HDMI connections. The Institute does not provide video adapters for notebooks, tablets or other mobile devices. (See [here](#) for information on classroom support resources.)
- USB flash drive
- CAT-5e or CAT-6 Ethernet cable (25 ft or longer recommended)
- Laptop anti-theft cable lock
- A laptop with a webcam and microphone is recommended, or an external webcam, as well as a USB microphone and headphones

#### *Network Connections*

Georgia Tech currently provides wireless access in nearly every building on campus, including offices, labs, classrooms, student residence halls, and most outdoor spaces. Visit [www.lawn.gatech.edu](http://www.lawn.gatech.edu) for more information and coverage maps.

In addition, all rooms in campus residence halls offer Gigabit-speed wired internet access. Each

room has as many wired connections as students. Housing fees cover access; there is no additional charge. To access the network using a wired connection, students living in campus residence halls will need a CAT-5e or CAT-6 Ethernet cable for their computer.

### *Printing*

#### *Commons/Library/Housing/Student Center:*

Although owning a printer is not required, many students purchase a printer for their own convenience. The printer should be connected using a USB or wired network connection (wireless printing is not supported). High speed laser printing for students is also available throughout the campus, including the Library, Student Center, many schools, colleges, and campus housing areas. This service is managed by Printing and Copying Services and the Office of Information Technology via the Pharos printing system utilizing Buzzcard funds, and a \$2.20 print allocation provided to students on a weekly basis. For more information about this service, please visit <http://b.gatech.edu/2qbe1QN>.

#### *CentralPS:*

The Central Printing Service (Central PS) is another printing option for students who need to print large volumes and/or who do not need the job immediately. This is an offsite printing service with print jobs delivered to bins in the Student Center Computer Cluster approximately three times a day Monday - Friday. Students are currently not charged for Central PS printing, but are limited to 1200 pages per semester. For more information about this service, please visit <http://b.gatech.edu/2qbe1QN>

#### *Large Format Printing:*

Large format printing (poster printing) is available at different locations on campus, including the Multimedia Studio located on the ground floor of the Georgia Tech Library, and Paper & Clay in the Student Center. Print jobs at both locations are priced by the linear foot for different paper types (gloss or matte) and are available from 24" – 48" wide. Additional information is available at <http://library.gatech.edu/services/computing.php> and <http://paperandclay.gatech.edu>.

## **STANDARD SOFTWARE**

Georgia Tech supports a standard software suite for both Windows and macOS systems. Standard software minimizes software incompatibilities between students and faculty, helps meet educational goals, improves the effectiveness and timeliness of software support, and helps minimize support costs. The Office of Information Technology (OIT) and Wreck Techs will actively support the standard software. Most standard software will additionally be available for student use in the general-purpose [computing clusters](#) maintained by OIT.

Students should install software packages at the time they are needed for use in their courses; many packages are available for free at [software.oit.gatech.edu](http://software.oit.gatech.edu), or through vendors offering academic discounts, such as OnTheHub/E-Academy ([gatech.e-academy.com](http://gatech.e-academy.com)). Be aware that downloading and installing additional software can substantially affect the performance of your computer. Removal of software from expired trials is encouraged to maximize the operating speed of your system.

Since the Technology Support Center and Wreck Tech cannot support all software, if students choose to use any non-standard software, they may be solely responsible for maintaining it.

Students should have available a record of the license keys for all their purchased software so that these may be re-installed in the event of a serious problem or system reinstall.

***The standard software suite for Windows and macOS is as follows:***

Windows Systems

- Operating System:** Microsoft Windows 10 (64-bit)  
 Note: Microsoft Windows 8.1 is still supported at this time  
 Note: Included with new computer purchase.
- Email:** Office 365 Exchange (can be used with any web browser)  
 Note: Accessible online at [mail.gatech.edu](mailto:mail.gatech.edu), no purchase or installation required.
- Data Backup:** Windows Backup  
 Note: Included as part of Windows 7 and newer versions. Requires external hard drive.  
 Optional: Crashplan provides unlimited backup and storage for a fee (visit this [link](#) for more details). OneDrive cloud storage is another (free) option that can be accessed through [office365.gatech.edu](http://office365.gatech.edu).  
[Here](#) is a document that provides some good advice on Data Backup.
- Security:** Georgia Tech expects each machine to have security software installed, whether it's a part of the Operating System or a 3rd party software. For more information about this requirement, please:
- Read the [Georgia Tech Acceptable Use Policy](#):
  - Familiarize yourself with the Georgia Tech Cyber Security website located at [security.gatech.edu](http://security.gatech.edu).

**Word Processor, Spreadsheet, Presentation Software:**

Microsoft Office 365 ProPlus or OpenOffice  
 Georgia Tech students can download Office 365 ProPlus for free by following these [instructions](#).  
[LibreOffice](#) and [OpenOffice](#) are free Open Source office suite alternatives.

- Online Storage:** As part of the Office 365 Pro Plus package, students will have access to OneDrive for Business for file syncing and storage. (See FAQ Q23 for additional information.)

macOS Systems

- Operating System:** Apple macOS High Sierra 10.13  
 Note: 10.11 El Capitan and 10.12 Sierra are still acceptable at this time. Note:  
 Included with new computer purchase.

- Email:** Office 365 Exchange (can be used with any web browser)  
 Note: Accessible online at [mail.gatech.edu](mailto:mail.gatech.edu) no purchase or installation required. Students' GT email address is forwarded to the email address you provided when you applied by default. To set up an Office 365 mailbox, follow these [instructions](#).
- Data Backup:** Apple Time Machine  
 Note: Included with macOS. Requires external hard drive.  
 Optional: Crashplan provides unlimited backup and storage for a fee (visit this [link](#) for more details). OneDrive cloud storage is another option that can be accessed through [office365.gatech.edu](http://office365.gatech.edu).
- Security:** Georgia Tech expects each machine to have security software installed, whether it's a part of the Operating System or a 3rd party software. For more information about this requirement, please:
- Read the [Georgia Tech Acceptable Use Policy](#):
  - Familiarize yourself with the Georgia Tech Cyber Security website located at [security.gatech.edu](http://security.gatech.edu).

### **Word Processor, Spreadsheet, Presentation Software**

Microsoft Office 365 Pro Plus, OpenOffice, or iWork Suite (free download for Macs)  
 Georgia Tech students can download Office 365 ProPlus for free by following these [instructions](#).  
[LibreOffice](#) and [OpenOffice](#) are free Open Source office suite alternatives.

### **Windows Compatibility:**

Windows compatibility software is not required campus-wide. However, some classes may require the use of specific, Windows-only applications. Students in these classes choosing to use macOS systems can install virtualization software (Parallels Desktop (paid) or VMware Fusion (free)) and a fully licensed copy of Microsoft Windows 8.1 (or newer) in order to run Windows applications. Keep in mind that virtual machines take away from your total available RAM; this is why we recommend a minimum of 8GB.

#### *LINUX Operating Systems*

OIT recommends that students who need to use Linux for class assignments carefully consider which distribution of Linux they will install. For the best experience possible, OIT recommends students stay with Ubuntu-based Linux distributions such as one of the following:

- Ubuntu
- Linux Mint

- Elementary OS

These distributions offer the most familiar user interface and are relatively easy to interact with.

**IMPORTANT NOTE:** It is **highly recommended** that any Linux distribution be used as a **Virtual Machine** and not as a multi-boot or Boot Camp environment, since modifying the local partition tables may lead to unstable computer systems and have a high potential for data loss.

Please know that OIT and the Technology Support Center provide “limited/best effort” support for Linux distributions at this time. Some support documents have been created to support Linux users and are available at [faq.oit.gatech.edu](http://faq.oit.gatech.edu) or for wireless configuration at [lawn.gatech.edu](http://lawn.gatech.edu).

The standard software suite indicates software versions known at the time of this printing. At the time of purchase, students should acquire the latest versions for the computer they will be using. If you purchase software from the Technology Store, then you will always receive the current version. The Technology Store can be accessed online (<http://techstuff.gatech.edu>) and offers exclusive discount pricing for the Georgia Tech community on software, hardware, and accessories. Additional purchasing options include e-academy / on-the-hub (<http://www.onthehub.com/>) – an online vendor offering academic discounts for essential and curriculum-based software – or other commercial sources.

### FINANCIAL CONSIDERATIONS

Through an appeals process, computer ownership costs and expenses may be added to the Institute's Cost of Attendance (Student Budget) for entering freshmen and undergraduate transfer students. Applicants who apply for student financial aid through the Office of Scholarships and Financial Aid (OSFA) may request to have a one-time adjustment up to a maximum of \$1100 added to their Cost of Attendance for purposes of determining his or her eligibility for student financial assistance. A receipt showing computer purchase costs will be required at the start of the first term. Procedures on how to initiate this request can be found at [www.finaid.gatech.edu/costs](http://www.finaid.gatech.edu/costs). Contact a financial aid advisor, listed at [www.finaid.gatech.edu/contacts](http://www.finaid.gatech.edu/contacts), with any questions.

### COMPUTER SUPPORT

Georgia Tech provides the following support facilities and services:

- Printing (limited)
- Internet access
- Email
- Centralized network storage (limited) and basic web-hosting
- Computer labs for short-term access to computers running the standard software
- Departmental clusters or labs with major-specific software (e.g., mathematical manipulation and calculation, CAD, compilers, and databases)
- Special classrooms and labs for computer-enhanced presentations

*Technology Support Center*  
[support@oit.gatech.edu](mailto:support@oit.gatech.edu)

Services provided by the OIT-Technology Support Center include but are not limited to: GTAccount, email and Wireless Network support. The OIT-Technology Support Center is also available to students to offer consultation about computer hardware configurations. The Center is in Room 215 of the Clough Undergraduate Learning Commons, and is available for walk-in support and at 404-894-7173. User Assistants are also available in the Library computer clusters. The Technology Support Center also offers How-to Clinics each semester. See [tsc.oit.gatech.edu](http://tsc.oit.gatech.edu) for dates and times, as well as a complete listing of services and hours of operation.



### *Wreck Techs*

Wreck Techs provides full support to residents of the on-campus residence halls. Wreck Techs utilizes student technicians as Residential Technology Advisors (RTAs) who are available to provide telephone, online chat, in-office, and on-site technical support to residents. RTAs are available to assist students with such tasks as connecting to the GT wired or wireless network, installing anti-virus software, and assisting with connecting gaming/personal entertainment devices to the Georgia Tech network.

Wreck Techs is the only service on campus that provides After Hours Support (see [wrecktechs.gatech.edu](http://wrecktechs.gatech.edu) for hours of operation) and in-room repairs. Students may leave their laptops in the Wreck Techs office in order to obtain technical assistance with diagnostic checks, virus and malware removal, and adding software. All residence hall wireless access points and wired network connections are maintained, supported, and repaired by Wreck Techs. Wreck Techs will also conduct in-room assistance without appointments during Fall Move-in week.

### *Third Party Support*

All computer repair and upgrade services for Apple, Dell, Lenovo, and HP are referred to outside Support Vendor Repair. Please note that there is no affiliation whatsoever to OIT with these Service locations and users can choose to seek computer repair from anywhere else not referred. Hardware repairs on all brands of computers, regardless of where they were purchased or current warranty status, can be facilitated at referred location.

## **COMPUTERSECURITY**

All members of the Georgia Tech community play a role in protecting the Institute's information assets and systems. To help facilitate this effort, we ask that you do the following:

- Read the [Georgia Tech Acceptable Use Policy](#).
- Review the GT Information Security online tutorial located at [security.gatech.edu/](http://security.gatech.edu/)
- Create strong passwords and do not share them with anyone for any reason. A strong password has at least eleven characters and uses a combination of numbers, upper and lower case letters, and special symbols (!@#%&\*-+). Do not use the same password for multiple purposes or websites. Password management tools (e.g. LastPass [lastpass.com](http://lastpass.com)) are highly recommended, and can help with the development of strong passwords.
- Register your devices with the GT Police at <http://police.gatech.edu/registration>
- GT Police also offers free laptop engraving of your Georgia Tech ID number on your laptop. Email [crimetips@police.gatech.edu](mailto:crimetips@police.gatech.edu) to request an appointment.
- Keep software applications, operating systems, and security patches current by visiting vendor websites regularly. Microsoft Windows and Apple Macintosh users can set their computers to download Operating System patches automatically:

**Windows Users:** Enable Windows Update –

Start -> Windows Settings -> Update Security -> Windows Update

**Mac Users:** Enable Software Update –

System Preferences -> Software Update -> Check for updates (weekly)

- Perform regular backups and store them in a secure location.



- Verify that websites are secure prior to entering personal information by looking to see that your web browser is pointed to an https rather than an http address.
- Log off or lock your session when away from your computer.
- Prevent theft of your computer: use a cable lock to secure your laptop to a table or desk if you need to step away.
- Do not use your computer to download, copy, store, or redistribute copyrighted materials for which you do not have the legal right to do so.

### *Two-factor Authentication*

Georgia Tech considers the security and privacy of student and employee information to be of utmost importance. To keep our information safe, the Institute requires that all faculty, staff and student workers use two-factor authentication when accessing campus services and systems to strengthen the protection of student and employee data and maintain compliance with University System Information Security policy. To enroll in two-factor authentication before coming to campus, follow the instructions located in the document titled "[Pre-Checklist for Enrolling in Two-factor Authentication Using Duo](#)." Once you've downloaded the Duo app, you can finish your self-enrollment in two-factor authentication by going to the Two-factor Authentication website and following the instructions located under the "For Students" tab: <http://twofactor.oit.gatech.edu/students>. If you do not have a mobile phone, you can purchase a blue DUO token (and have it setup for your GT account) at the BuzzCard Center located at 48 5<sup>th</sup> St. NW, 2<sup>nd</sup> floor (inside Barnes & Noble / GT Bookstore), Atlanta, GA. The cost is \$22.00.

### **FREQUENTLY ASKED QUESTIONS**

- Q1: How can I determine if my current system will meet Georgia Tech's hardware requirements?  
 A1: Refer to the "Hardware Requirements" section of this document, the Student Computer Ownership (SCO) website ([www.sco.gatech.edu](http://www.sco.gatech.edu)), or the Technology Support Center.
- Q2: Is it better to upgrade my current computer or to buy a new one?  
 A2: This choice is dictated largely by your personal budget considerations. However, it is generally better to buy a new machine if you can. This machine will be faster, will have the latest technology, and generally have a longer usable life. Also, be aware that many modern laptops and most tablets cannot be upgraded. Upgrades are usually limited to adding RAM and, occasionally, internal storage.
- Q3: If I purchase a new computer, how should I decide on the processor speed?  
 A3: Modern systems now make use of multiple processors, or cores, to achieve high performance, as now most individual processors operate at GHz speeds. For example, dual-core machines are common and are sufficient for most needs, but upgrading to a quad-core or higher system will allow computationally intensive software (CAD, Matlab, etc.) to run faster. The best strategy is to purchase as many cores as possible since it would have a longer usable life and would be able to meet your educational needs during your time at Georgia Tech. A computer with few cores will adequately run the standard software but provides no room for expansion. Note that choosing a solid-state drive also provides a performance boost over traditional hard disks. A number of good choices exist in the \$1,000 to \$2,000 price range.
- Q4: What should I do if I have a problem with the network connection in my residence hall room?  
 A4: All rooms in Georgia Tech residence halls have the necessary network connections for your computer. These connections are fully supported by Wreck Techs. If you have any problems, you should visit [wrecktechs.gatech.edu](http://wrecktechs.gatech.edu) to review the available documentation. If support is still needed you can find the necessary contact information at the end of this document (and on

the Wreck Techs website).

Q5: If I do not own a printer, how will I print my documents?

A5: A moderate weekly quota is provided to students for color or black and white printing in any OIT Computer Cluster, and students may use their BuzzCard for pay-for-print if they ever need to exceed this quota. For larger printing needs, students may use a free central printing service (1200 pages/semester). See [www.oit.gatech.edu/service/computer-labs/printing](http://www.oit.gatech.edu/service/computer-labs/printing) for more details. Additionally, some departments/schools provide their students with additional free print allocation on a weekly, monthly, or semester basis.

Q6: If printers are optional, is it worth it for me to buy my own?

A6: While limited printing facilities are available across campus, it is certainly more convenient to have your own printer. Please see Answer 5 above for printing options. Note that wireless printing to personal printers in Housing is not supported.

Q7: I already have some of the standard software. May I purchase only certain packages from the TechnologyStore?

A7: Yes, you may purchase any package separately from the Technology Store. Call or email them for specific software prices.

Q8: How can I obtain software from Georgia Tech?

A8: Georgia Tech has site licenses for several software packages for use on your own computer. The software available can be downloaded at no cost from [software.oit.gatech.edu/](http://software.oit.gatech.edu/).

Q9: I don't want to use one of the components of the standard software suite. Can I use something else?

A9: Standard software minimizes software conflicts and increases the quality of software support. If you decide to use something other than the standard software, then it is your responsibility to purchase and maintain the software. It will be your responsibility to eliminate any software conflicts with the standard software as you start to share documents with your fellow students and submit homework assignments to your professors.

Q10: Can I use Linux and open source software?

A10: Yes, however, OIT and Wreck Techs only provide "limited/best effort" support for Linux operating systems and software, and you will be responsible for ensuring that this software is fully compatible with the standard software, as described in Answer 9 above. Limited assistance with installation and with connecting to the wireless network is available through Wreck Techs and the Technology Support Center.

Q11: Can I use an older OS?

A11: Do not use old operating systems that are no longer supported by their vendors, since they are unsecure when connected to the Internet. OIT supports only the software listed in this document.

Q12: Is there a place on campus that will service computers?

A12: You can contact the Technology Support Center for assistance and recommendations for computer repair. Located in the Clough Commons 2<sup>nd</sup> Floor RM 215, the Technology Support Center can provide you with a number of local vendors if your computer is no longer covered under warranty. You can also contact Wreck Techs ([wrecktechs.gatech.edu](http://wrecktechs.gatech.edu)) to have an RTA conduct a diagnostic check.

Q13: Where can I find more information about using the Georgia Tech network and computer systems?

A13: The following web pages contain detailed information and links to other useful pages: [www.security.gatech.edu](http://www.security.gatech.edu) (GT Cybersecurity), [wrecktechs.gatech.edu](http://wrecktechs.gatech.edu) (Wreck Techs), and [www.sco.gatech.edu](http://www.sco.gatech.edu) (Student Computer Ownership).

Q14: What software can I install to prevent virus or malware from infecting my computer?

A14: OIT and Wreck Techs recommend and supports Windows Defender for PCs and Sophos and Apple Xprotect (built in) for Macs to help guard against viruses, spyware, and other malicious software.

Q15: Should I purchase a USB flash drive?

A15: Yes. These devices are a great option for removable storage. However, they can be easy to lose, so give great care to the type of information you store on these devices. Warning: These devices can transfer viruses from one machine to another, so it is important to use antivirus software, which will automatically scan these devices.

Q16: How can I protect my laptop from theft?

A16: Always lock your laptop to something sturdy using a cable lock. In addition, there are products available for tracking stolen laptops. Laptops should also be registered with the Georgia Tech Police Department (see: [police.gatech.edu/services/property/index.php](http://police.gatech.edu/services/property/index.php)) to aid recovery when lost or stolen. Additionally, it is advisable to set a login password for each operating system on your computer to prevent exploitation of your information if the laptop is stolen.

Q17: Are there any advantages to purchasing either a Mac or a PC?

A17: Generally, the selection of a Macintosh or PC notebook is an individual choice. However, some departments may have specific recommendations. Contact your academic advisor for information to determine specific requirements and recommendations.

Q18: What are the guidelines for using my computer for gaming, business or other alternative functions?

A18: Please reference the Acceptable Uses Policy (AUP), the Cyber Security Policy (CSP), and the Data Privacy Policy (DPP): <http://www.news.gatech.edu/2017/04/10/new-policies-protect-data-and-guide-information-technology-use>

Q19: What kind of system recovery options should I have if my machine does not have a recovery partition?

A19: You will need to have all your installation media available in case you need to reinstall your operating system.

Q20: How do I make certain my software is up to date?

A20: Secunia, for Windows, will check to see if your software is up to date. This is a free utility. AppFresh for Mac is also recommended.

Q21: Is there a place on campus where I could get my computer cleaned or where they can help me improve its performance?

A21: Yes, OIT-Technology Support Center and Wreck Techs will assist you with this.

Q22: Can I use a router or switch in my dorm room?

A22: Routers are allowed, but a wireless router must have the broadcasting radio disabled to meet Georgia Tech Policies and Requirements. However, it is the student's responsibility for any activity from his/her IP. A switch will not work on the Georgia Tech START (LAN wired) network.

Q23: What is the difference between online storage and online backup?

A23: Online storage can either be an additional space to store documents (like an additional drive) or it can synchronize files between your computer and a cloud based storage system. With online storage, if you delete files they are both flagged for removal and hidden from view, or are immediately written over. Some online storage solutions will retain backups but there is no guarantee that the files are retained, especially if there is a space limitation.

that specific file and selects to purge the file securely. The best online backup systems do not impose a limit on the size of space you are utilizing for your backup and will keep multiple recoverable versions of your documents so that you have additional methods to undo changes or recover previous versions.

## **IMPORTANT CONTACT NUMBERS AND ADDRESSES**

### *More information:*

#### Georgia Tech Student Computer Ownership

- Website: [www.sco.gatech.edu](http://www.sco.gatech.edu)

### *Technical/connectivity/compatibility questions:*

#### Technology Support Center

- Telephone: 404-894-7173
- Email: [support@oit.gatech.edu](mailto:support@oit.gatech.edu)
- Website: [tsc.oit.gatech.edu](http://tsc.oit.gatech.edu)
- Walk-in support: Technology Support Center (in Clough Commons)

#### Wreck Techs (Campus Services)

- Telephone: 404-894-0044
- Email: [support@wrecktechs.gatech.edu](mailto:support@wrecktechs.gatech.edu)
- Website: [wrecktechs.gatech.edu](http://wrecktechs.gatech.edu)
- Walk-in support:  
East Campus: Upper Level of Brittain Dining Hall (between classroom and vending machines)  
West Campus: Curran Parking Deck 8th Street Entrance next to WingZone

### *General pricing/availability/ordering:*

#### Technology Store @ Georgia Tech (Barnes & Noble @ Georgia Tech)

- Telephone: 404-894-2377
- Fax: 404-894-2530
- Email: [Tech.Center@bks.gatech.edu](mailto:Tech.Center@bks.gatech.edu)
- Website: [techstuff.gatech.edu](http://techstuff.gatech.edu)

### *Financial aid/alternative loans:*

#### Georgia Tech Office of Scholarships and Financial Aid

- Telephone: 404-894-4160
- Email: [finaid@gatech.edu](mailto:finaid@gatech.edu)
- Website: [www.finaid.gatech.edu](http://www.finaid.gatech.edu)

### *Two-factor Authentication Using Duo:*

- Email: [2FA@oit.gatech.edu](mailto:2FA@oit.gatech.edu)
- Website: <http://www.twofactor.oit.gatech.edu>