

STUDENT COMPUTER OWNERSHIP INITIATIVE

INTRODUCTION

Georgia Tech students, graduates, faculty, and researchers have long been recognized for their innovative problem solving. Faculty members are known for their creative teaching methods, including project-based education, which teach students teamwork and group problem-solving skills and provide students with transferable skills that will be used throughout their careers. In 1995, believing that the time had come for the “next step” in creative learning and academic success in an increasingly technologically-based society, President G. Wayne Clough appointed a Student Computer Ownership Committee, composed of students, faculty, and staff, to study the issue of required computer ownership by all students. After careful study and extensive deliberations by the committee, a student computer ownership policy was recommended by the Georgia Tech faculty and approved by the University System of Georgia Board of Regents. This policy requires all students joining the class of 2001 and all subsequent classes to own a computer.

This brochure describes several elements of the Georgia Tech policy on Student Computer Ownership (SCO) as well as computer ownership financial aid information. Another mailing to be sent in early July to students starting in the Fall semester will contain more detailed information on purchasing a computer from the Georgia Tech Computer Store, should you choose to do so. Complete information can be found on the Georgia Tech SCO website at www.sco.gatech.edu.

STANDARD SOFTWARE

A major part of the Student Computer Ownership Initiative was the establishment of a standard suite of software to meet the communication, productivity, and educational needs of the student. Standard software minimizes software incompatibilities between students and faculty, helps meet educational goals, improves the effectiveness and timeliness of software support, and helps to minimize support costs. The standard software suite is as follows:

Type	Vendor	Software Title
Operating System	Microsoft Apple	Windows 98 Mac OS 8.5 or higher
Communications	Qualcomm Netscape NCSA Dartmouth C.	Eudora Pro 4.2 (Win) or 4.2.1 (Mac) Communicator 4.6 or higher Telnet 2.7 (Mac) Fetch 3.0.3 (Mac)
Productivity & Education	Microsoft Macromedia Waterloo Maple Mathworks Synergy	Office 2000 Std (Win) or 98 (Mac) Dreamweaver 3.0 Maple 6 Matlab 5.3 (Win) or 5.2 (Mac) or higher KaleidaGraph 3.5

The Student Computer Ownership Committee has carefully chosen the components of this software suite. Functionality and price were key factors in making these decisions. The standard software will be actively supported by Georgia Tech’s Office of Information Technology (OIT). In addition, most titles will be available for student use in the general-purpose computing clusters maintained by OIT.

Software costs to the student should be minimized by the use of this standard software suite. Professors are strongly encouraged to use standard software in their courses. If a professor chooses to use non-standard software, he/she will be solely responsible for providing software support to their students since OIT *will only support* the standard software. No software can be added or removed from this suite without the specific approval of the Student Computer Ownership Committee and the Vice Provost for Undergraduate Affairs.

PURCHASING STANDARD SOFTWARE

The operating system software is preinstalled in new computer systems. If you need to upgrade, either operating system can be purchased at the Georgia Tech Computer Store or elsewhere.

The communications software is available to all Georgia Tech students under campus-wide licenses. You should obtain this software soon after your arrival on campus since it will be used immediately in your classes. You may download the software free of charge from a GT server (for details, see the SCO website www.sco.gatech.edu). Alternatively, you may purchase the software on CD from the GT Computer Store for \$3.

The productivity and educational software can be purchased individually from the GT Computer Store. Students may buy software packages as they are required to use them in their courses. However, students should purchase or already have Microsoft Office when they arrive on campus since it will be used immediately in their classes.

The standard software list indicates the most current version of the software at the time of this printing. At the time of purchase, students should acquire the latest versions for the computer (Windows or Macintosh) they will be using. If the software is purchased from the GT Computer Store, you *will* receive the most current version at the time of your purchase.

Note: While the standard software may be purchased from any vendor, the prices at the GT Computer Store are particularly attractive because of large educational discounts. It is recommended that students starting in the Fall semester wait until the GT Computer Store computer purchase information is sent to you in early July before making any purchase decisions.

HARDWARE REQUIREMENTS

A student's computer should effectively run the standard software suite described above. The computer should be fast enough and have enough memory and disk space to provide satisfactory performance over a usable life of two to three years. All student computers should have the following components (see the information on currently owned hardware to check to see if you reach a minimum with your existing system).

Processor: At least Pentium III class or at least a Power Macintosh G3 processor

Memory: at least 128 MB

Hard Drive: 4 GB or larger

Monitor: 15 inch or larger (See Q4 in the "Policy Questions & Answers" section.)

CD-ROM

Sound card (standard on Macintosh and some Windows models)

Speakers

10Base-T ethernet port or modem

Network Connections

All rooms in campus residence halls are wired for computer network access. Each room has as many connections as beds. Access and basic usage charges are covered by housing fees. There is no additional charge. To access the network, students *living in campus residence halls* will need a 10Base-T (twisted pair) ethernet port and an appropriate cable for their computer. (A 10Base-T ethernet port is standard on Macintosh and some Windows models.) If your computer *does not* have a standard 10Base-T ethernet port, you will need to purchase a network interface card¹. The GT Computer Store carries two different network interface cards made by 3Com and MaxTech that work well on the GT network. Call the GT Computer Store for specific model and price information.

Students *not living in campus residence halls* will need to purchase a 56K (or faster) modem (a 10Base-T ethernet port *is not* required). The Board of Regents of the University System of Georgia currently has an agreement with CampusCWIX to provide a premium (PPP) dial-in connection to the GT network. The necessary software, installation assistance, and billing are provided by CampusCWIX. The number to call for more information is listed in the section entitled "Important Contact Numbers and Addresses" on the last page of this brochure.

Printers

There are limited printing facilities available to students in the public computing clusters located on campus and in the campus central computing facility. Although owning a printer is not required, many students purchase a printer for their own convenience. In OIT clusters, printing is limited to 20 pages per job.

PURCHASING HARDWARE

If you want to purchase a new computer, you should try to take advantage of the constantly falling prices of computer equipment. Delay your purchase as long as possible, but make sure that you have your computer before classes begin. If you purchase a computer after your arrival on campus, delivery delays may prevent you from having the machine for a month or more. You should also be aware that there is a difference between network-ready computers and computers intended for home use. If you will be living in a campus residence hall, make sure the computer you buy is network-ready. As a rough guideline, we are confident that there are computers available for under \$2000 which will be suitable for your computing needs.

When you purchase a new computer, make sure that it has all of the components listed in the "Hardware Requirements" section above. While the fastest processor available will provide great performance, it comes at a cost premium. A good compromise between speed and cost is a processor one or two speeds slower than the fastest. It is not recommended that you purchase a new computer with a processor that is significantly less powerful than the current generation. The standard software suite at Georgia Tech will evolve during your time as a student, and at some point, a machine with a slow processor may not be able to run this software effectively. When this happens, you will need to upgrade or buy another computer. It is likely to be more cost effective to purchase a more powerful machine now than to upgrade later. In addition, we do not recommend that you purchase the low end system from any manufacturer, the reason being that some computers are not network-ready, and even after being upgraded do not work well on the GT network. Please feel free to check with our computer bookstore or The Office of Information Technology if you are not comfortable with any of these directions.

If you *currently own a computer*, you should make sure that it has all of the components listed in the "Hardware Requirements" section above. However, you can compromise in two areas. Make sure that your processor is at least Pentium II class or faster and that you

¹ See Question 6 in the "Policy Questions & Answers" section.

have at least 64 MB of memory and a 4 GB hard drive. If your computer does not meet these specifications, we cannot be sure that you will be able to utilize the SCO software packages: you should seriously consider an upgrade or the purchase of a new computer.

General information on purchasing a computer will be available on the SCO website (www.sco.gatech.edu). More specific information on purchasing a computer from the GT Computer Store will be sent in early July for students starting in the Fall semester. This mailing will be sent to all accepted students who have chosen to attend Georgia Tech (i.e., those students who have paid their admission deposit).

Note: While your computer may be purchased from any vendor, be aware that the GT Computer Store carries a full line of computer hardware and peripherals at very competitive prices. It is recommended that students starting in the Fall semester wait until the GT Computer Store computer purchase information is sent to you in early July before making any purchase decisions.

COMPUTER SUPPORT

Georgia Tech will actively support student computers and the standard software.

Residence Technology Advisors (RTAs) are knowledgeable students who are available in every residence hall to provide telephone and on-site technical support to residents on *networking questions*. RTAs assist students in connecting their computers to the GT network.

Georgia Tech's Office of Information Technology (OIT) Customer Support Center is available to students to answer questions about *hardware configurations and software applications*. User Assistants are also available in the computing clusters on campus.

During the warranty period, students who have purchased their computer through the GT Computer Store will have hardware service provided by the manufacturer and by the GT Computer Store, who will utilize OIT's Field Services. After the warranty period, the GT Computer Store will provide repair services or hardware and software installation on any brand computer for a fee.

In addition to the above hardware and software support, Georgia Tech will provide the following support facilities and services:

- Printing (limited)
- Internet access
- Computer accounts for electronic mail
- Clusters 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 database)
- Special classrooms and labs for computer-enhanced presentations

FINANCING OPTIONS

While the actual cost of computer hardware and software is always changing, appropriate systems (including a computer, monitor, keyboard, and requisite software) will be available for \$2000 or less. All Georgia Tech *prospective freshmen* who have been accepted for admission and have applied for financial aid *automatically* will have \$1500 added to their student budget. *Transfer students* who have been accepted for admission and have applied for financial aid must contact the financial aid office to *request* a budget adjustment to add the cost of the required computer. The family contribution for education

(as determined by the results of the federal application for financial aid) will then be subtracted from the student budget to determine a student's need. Thus, the cost of a computer is being considered when financial aid awards are made.

The Institute, in an attempt to see that the additional cost of a computer does not prevent students from enrolling, has committed funding—grant and loan—to assist financially needy students in purchasing a computer. Computer purchase funds will be distributed as equitably as possible to on-time financial aid applicants qualifying for need-based aid. Funds designated for a computer purchase will be available to the student at the beginning of the student's first semester of enrollment. (This funding will be included in the financial aid award letter that the student receives in early April. Once the award letter is received, questions should be directed to the student's financial aid counselor.)

NOTE: As a public institution Georgia Tech is not in a position to fully fund its financially-needy students. As set forth in both Admission and Financial Aid publications, "Georgia Tech offers a variety of financial aid programs to assist students in meeting normal college expenses; however, the amount of aid granted seldom meets all educational expenses."

OTHER FINANCING OPTIONS

Parents of students who wish to finance a computer purchase are encouraged to pursue financing through the Federal Parent Loan for Undergraduate Students (PLUS) program. The PLUS program offers credit-worthy² parents of undergraduate students the opportunity to borrow up to the student's cost of education (less any financial aid received). The interest rate on these loans is variable³, but is capped at 9%; one-half of the loan amount is available at the beginning of each semester, and repayment may be extended for up to ten (10) years. Detailed information on the PLUS program and application procedures is available from the Office of Student Financial Planning and Services.

Personal loans are available from your "home" bank or through local banks, such as Bank of America. Apple Computer, Inc. also offers loans for the purchase of their computers. Contact telephone numbers are listed on the back of this brochure.

POLICY QUESTIONS & ANSWERS

Q1: How can I find out if my current system will meet Georgia Tech's hardware requirements?

A1: Refer to the "Hardware Requirements" section of this brochure, the SCO website, or the OIT Customer Support Center for current hardware requirements. Make sure that your processor speed is Pentium II class or faster and that you have at least 64 MB of memory and a 4 GB hard drive. If your computer does not meet these specifications, you should seriously consider an upgrade or the purchase of a new computer.

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.

Q3: If I purchase a new computer, how should I decide on the processor speed?

² Students whose parents apply for a PLUS and are turned down may secure a long-term, low-interest institutional loan to cover the cost of a computer.

³ The rate is based on the T-bill rate on July 1 plus 3.10%. The rate for the 98-99 academic year was 8.26%.

A3: The best strategy is to purchase a relatively fast machine since it would have a longer usable life and would be able to meet your educational needs for most of your time at Georgia Tech. A good compromise between speed and cost is a processor one or two speeds slower than the fastest. A computer at the low-end of the speed scale will just adequately run the standard software and provide no room for expansion. Since the price of computers keeps coming down, a number of good choices exist in the \$1,000 to \$2,000 price range. Beyond this price range lie the high-end machines, with multiple processors, high-speed graphics capability, and other such technology. The gain in performance offered by such machines comes at a substantial premium in price, and such an investment is not necessary for most students. If, at some point in the future, a student develops a need for such power, it will probably be much more economical to buy it then.

Q4: What size monitor should I get?

A4: A 15" monitor is acceptable, but a 17" monitor is easier to use. However, only about half of the rooms in the Georgia Tech residence halls have computer furniture that will adapt to a 17" monitor. In the others, the hutch unit that sits upon the student's desk will need to be removed and used for another purpose (such as a book shelf or a food pantry, etc.) elsewhere in the room.

Q5: What do I need to connect to the Georgia Tech network or to get on the Internet?

A5: If you are *living in a campus residence hall*, you will need a 10BaseT ethernet card and an appropriate cable for your computer. If you do not have a standard 10BaseT ethernet card on your computer, you will need to purchase one. The GT Computer Store carries network cards made by 3com and Maxtech, which are both supported and work well with the Georgia Tech network. For additional information, please call the GT Computer Store at (404) 894-2377. If you are *not living in a campus residence hall*, you will need a 56K to connect (see page 3 "Network Connections" for additional details).

Q6: What if I already have a network interface card or if I purchase a network interface card that is not one of the recommended brands?

A6: We recognize that there are many network interface cards that may work on the Georgia Tech network. However, given the large number and the sheer variety of network interface cards that are available, it is difficult to provide a quality-level of support for every one. If you have one of the recommended brands of network interface cards, you are *guaranteed unlimited support*. If you have any other brand, the Housing RTAs will provide assistance for thirty minutes. If the RTA is not able to get you connected to the GT network within this time period, you will need to contact the computer manufacturer and/or the network interface card manufacturer for further assistance.

Q7: Should I purchase a modem?

A7: You will only need a modem if you do not live in a campus residence hall. See Question 5.

Q8: What should I do if I have a problem with the network connection in my residence hall room?

A8: All rooms in Georgia Tech residence halls have the necessary network connections for your computer. These connections are fully supported by ResNet and OIT. If you have any problems, you should first call the ResNet office. Contact information is listed on the back of this brochure.

Q9: If I don't own a printer, how will I print my documents?

A9: Limited printing facilities are available at several public computing clusters on campus. The Office of Information Technology will provide students with information as to the location of these clusters and the types of machines and printers that are found in each one. In the OIT clusters, printing is limited to 20 pages per job.

Q10: If printers are optional, is it worth it for me to buy my own?

A10: While limited printing facilities are available in the computing clusters on campus, it is certainly more convenient to have your own printer. Clusters may not always be available when you need to print a document.

Q11: I already have some of the standard software. May I purchase only certain packages from the Georgia Tech Computer Store?

A11: Yes, you may purchase any package separately from the GT Computer Store. Call or e-mail them for specific software prices. Be aware, however, that the Small Business Edition of Microsoft Office, which comes with a lot of computers, does not include the PowerPoint application.

Q12: How can I obtain the communications software?

A12: Georgia Tech has site licenses for Netscape, Eudora, Telnet, and Fetch, which makes them available to all GT students. The software can be downloaded at no cost from a GT server, or purchased on CD from the GT Computer Store for \$3. For details, see the SCO website www.sco.gatech.edu.

Q13: I don't want to use one of the components of the standard software suite. Can I use something else?

A13: Our two main goals in establishing a standard software suite are to minimize software conflicts and to increase the quality of software support. To help achieve these goals, the Georgia Tech Office of Information Technology *will only support* the software in the standard software suite. If you decide to use something other than the standard software it is your responsibility to purchase, maintain, and support 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 to submit homework assignments to your professors. Given the *difficulty* and the *time* associated with doing this, it is recommended that you use the standard software suite listed under the "Standard Software" section.

Q14: I already use a different internet service provider, can I stay with that ISP and still access my Georgia Tech account?

A14: Secure Shell (ssh) is a secure and encrypted way of connecting to a unix system such as Acme (the name given to the Georgia Tech complex of Sun systems). The acme machines have ssh running on them which will allow connections from off of the Georgia Tech campus. Therefore, students using an ssh client, may establish a connection to the Acme system from any Internet Service Provider (ISP) in order to do class related work, check e-mail, or create a web page. Students using an Internet Service Provider (ISP) other than CampusCWIX, will be unable to access their e-mail *through a graphical program* such as Eudora or web pages that are restricted to campus only.

IMPORTANT CONTACT NUMBERS AND ADDRESSES

More information:

Georgia Tech Student Computer Ownership Initiative
Website.....www.sco.gatech.edu

Technical/connectivity/compatibility questions:

GT Office of Information Technology Customer Support Center
Telephone404-894-7173
E-mail.....support@oit.gatech.edu
Website.....www.oit.gatech.edu

ResNet (Department of Housing)
Telephone404-894-0044
E-mail.....support@resnet.gatech.edu
Website.....www.resnet.gatech.edu

Dial-in connection (for students living off-campus):

CampusCWIX
Telephone888-285-1803
E-mail.....info@campuscwix.net
Website.....www.campuscwix.net

General pricing/availability/ordering:

Georgia Tech Computer Store
Telephone404-894-2377
Fax.....404-894-1858
E-mail.....GTCS@bks.gatech.edu
Website.....www.gtcs.stucen.gatech.edu

Financial aid/PLUS loans:

Georgia Tech Office of Student Financial Planning and Services
Telephone404-894-4160
E-mail.....finaid@success.gatech.edu
Website.....www.enrollment.gatech.edu/finaid

Personal loans:

Bank of America (Metro Atlanta)
Telephone404-768-2265
Telephone (Outside Metro Atlanta).....800-299-2265

Apple Computer Loan Program
Telephone800-APPLELN
Website.....www.apple.com/financing

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Georgia Institute of Technology
Office of Enrollment Services