Chapter 3

Work and Study at Cornell
One of the adjustments to starting grad school is figuring out how to do the work of a graduate student. Your department and your advisor should help you out here, but there are many resources that Cornell provides as well. These resources can help you with day-to-day aspects of being a grad student, as well as more unusual needs. This chapter summarizes some of the most common resources that grad students use. However, you should also ask around your own department (the faculty, the graduate students, and the staff) if there are labs, storerooms, photocopiers, or other facilities that grad students in your department use. Access to these things is sometimes available only if you know to ask.

3.1 Library System

The Cornell University Library is one of the largest academic research libraries in the United States. Within the CU system there are nineteen libraries, housing over seven million printed volumes, more than 60,000 journals, and over 1,000 networked resources. The Library Gateway at <http://www.library.cornell.edu> can help you locate books and find out how to use various library resources, including information on each of the branch libraries. The Ithaca campus library branches are:

- Africana Library, Africana Studies and Research Center (C1)
- Catherwood Library (Industrial and Labor Relations), Ives Hall (CD5)
- Engineering Library, Carpenter Hall (C6)
- Entomology Library, Comstock Hall (D5)
- Fine Arts Library, Sibley Hall (C3)
- Hotel School Library, Statler Hall (C5–6)
- Law Library, Myron Taylor Hall (B6)
- Library Annex (Storage Facility), Palm Road
- Johnson Graduate School of Management Library, Sage Hall (C5–6)
- Mann Library (Agriculture, Life Sciences, & Human Ecology) (E4)
- Mathematics library, Malott Hall (D4–5)
- Music Library, White Hall (B4)
- Olin Library (Graduate/Research library) (C5)
- Physical Sciences Library, Clark Hall (D4)
- Rare and Manuscript Collections, Kroch Library, access via Olin Library (C5)
- Uris Library (Undergraduate library) (BC5)
- Veterinary Library, Veterinary Education Center (HJ4–5)

A definite plus for graduate students is that for non-reserve texts, the checkout period is six months. Unfortunately, for periodicals at the Engineering Library (including most journals) the checkout period is one day. This is an attempt to balance between the high demand for many periodicals while allowing time to take a periodical back to your office to read a single article and/or do photocopying. Many other branch libraries only allow periodicals to be taken out for an hour at a time, so this works out to be a good compromise.

There are online facilities for the library system that allow for periodical searches and interlibrary loans. In addition, the library provides access to some journals on-line, including many Engineering topic journals, such as all ASME and IEEE journals and conference proceedings, and many Springer-Verlag publications. The Engineering Library has a webpage describing the online journal resources at: <http://www.englib.cornell.edu/electronic-resources/journals>
3.2 SHOPS, SERVICES, AND RESEARCH RESOURCES

The “How to Find Electronic Journals” page gives a complete description of how to find online journals: <http://www.englib.cornell.edu/electronic-resources/journals/how2.html>

Most of the Engineering related online journals are listed, by publisher, on the “Publishers of Science Journals and Cornell’s Status on Access” page: <http://www.englib.cornell.edu/electronic-resources/journals/publishers.html>

This page may not give a complete listing, however. The electronic journal system continues to be developed as of the printing of this handbook; for up to date information you should go to the main online journal webpage mentioned above or contact a Cornell librarian.

The Engineering Library (<http://www.englib.cornell.edu>), in Carpenter Hall (C6), is the most significant library for most engineers and houses many volumes of engineering periodicals and texts. There are photocopying facilities on the first floor and a large computing center, the Academic Computing Center (ACCEL), on the second floor. More information about ACCEL appears in section 3.2.5.1.

3.2 Shops, Services, and Research Resources

Almost everything work related that you’ll need to buy as a graduate student, whether it be textbooks, lab equipment, or office equipment, is available on campus. There are also a wide range of machine shop, photocopying, computing, and consulting services available on campus. This is a summary of some of the most common places that grad students use. You should also ask your advisor and other grad students in your research group if there is a place they prefer you to use. One advantage to using on-campus stores and services is that you can almost always charge expenses directly to a research charge account (check out Section 3.4.1 for more information on this). However, if you’re spending your own money, there may be places around Ithaca or on the internet that charge less.

3.2.1 The Cornell Store (C5)

The Cornell Store (<http://www.store.cornell.edu>) carries a wide range of merchandise, including course textbooks, office supplies, Cornell paraphernalia, general books, art supplies, greeting cards, CDs, and even some dorm-type supplies. It is the only store in town that orders course books, including texts for all of the courses offered in the engineering college, though if you’re willing to go to some trouble to save some money, there are internet textbook sellers and some used book sources around Ithaca. In general, the campus store is not cheap, but, located in the middle of campus near McGraw Tower, it is conveniently close to the Engineering Quad.

Other features of the campus store include a snack food center, film processing, a computer store, stamp vending machines, a Tompkins County Trust Company branch, a CFCU branch, and ATMs for the Trust Company and CFCU. (A branch and ATM for the third major Ithaca bank is located in Willard Straight Hall(B5), just across Ho plaza from the store.)

3.2.2 Machine and Component Shops and Stock Rooms

There are several machine and component shops and services on campus, which could be beneficial to graduate students in engineering. Listed below are some of the more significant services. The two major design and fabrication facilities on campus are the Advanced Design and Fabrication Facility and the Laboratory of Atomic and Solid State Physics (LASSP) Main Machine Shop, but there are a number of other shops, some specialized to particular types of jobs. These facilities will all allow you to charge the work to a research charge account; check Section 3.4.1 for information on how to charge things to your advisor’s account.
CHAPTER 3. WORK AND STUDY AT CORNELL

Advance Design and Fabrication Facility, Upson Hall (C6)

LASSP Machine Shop and Stockroom, Clark Hall (D4)

<http://www.lassp.cornell.edu>

These two facilities will do design and fabrication jobs for you. They can provide technical assistance in design and also offer labor and machine time. If you think you may have special needs, you should go and talk to the managers of these facilities. It is very likely that they have come across your problem before and even if not, they may have some excellent suggestions. LASSP also runs a graduate student machine shop (managed by Bob Snedeker, 255-3951) that graduate students and other researchers can use.

Both of these facilities also have stockrooms that carry inventories of general-purpose items for any laboratory, like nuts and bolts and common materials like cold rolled steel, aluminum, etc.

The LASSP stockroom also carries items for simple electrical circuits like BNC cables, resistors, capacitors, some common chips, common parts, and adhesives. If you think you need something in your lab for research, it’s very likely that the LASSP stockroom will have it. Call 255-3966 for more information. You might also check with the Technical Operations Laboratory in LASSP, or the Newman laboratory stock room (255-3355).

Cornell Center for Materials Research (CCMR)

<http://www.ccmr.cornell.edu/facilities>

CCMR has useful facilities all over campus, and grad students can usually use their services and equipment even if they are not affiliated with CCMR (though check if the particular resource you want to use is available to you). A full list of their facilities is available at the website listed above.

CCMR has a small but neat and very useful machine shop in the basement of Bard Hall (C6). To use this, you need to see John Sinnott in B-56 Bard Hall, jps39@cornell.edu, 255-3371.

The sub-basement of Bard Hall (C6) and first floor of Snee Hall (C6) house a useful facility for microscopy — optical, scanning electron and tunneling. If you want to see something ‘small’ and are not sure whether you can do it or how you should do it, see John Hunt in SB56 Bard, hunt@ccmr.cornell.edu, 255-3789. There is an ion beam facility in Bard Hall and electron beam instruments in Snee Hall.

The CCMR computer facility is located in Clark Hall (D4).

Cornell Nanofabrication Facility (CNF)

<http://www.nnf.cornell.edu>

The CNF maintains a collection of equipment and expertise which they make available to researchers at Cornell and from around the U.S. to fabricate very small structures. (They define “very small” as a structure with critical dimensions less than 100 nm.) Much of the work of the CNF involves using technology developed by and for the semiconductor industry for other purposes — such as developing very small mechanical devices. They particularly encourage research on topics not usually associated with nanotechnology.

Getting started with the CNF requires the submission of a two-page proposal as well as some training. See their webpage for more information.

The CNF is currently located in Knight Laboratory (C6), but it will move to Duffield Hall once that building is completed (see section 8.5 for more information on Duffield Hall).

Emerson facility, Rhodes Hall (CD6)

This is primarily meant for use by undergraduates in Mechanical Engineering for their course work and other small projects. Some of the machines have demand for usage from local industry. Graduate students
and researchers in various engineering departments can also use this facility. For this, one should first talk
to Jeffrey Tuttle at 116 Rhodes Hall (255-5136) and figure out which machines and how much time are
needed in the shop. One then needs to get approval from the faculty in charge of the facility. Currently
you can meet Prof. Marjolein van der Meulen in 219 Upson Hall, mcv3@cornell.edu, for this purpose.

**EE components shop, Phillips 301 (D6)**

Cornell doesn’t provide much in the way of an electronics stockroom, but there is one resource. Bill Mutch
in 301 Phillips Hall maintains a limited stock of components for classroom use, particularly for EE 215
and EE 315. If you are a TA, or are doing a project for a class or professor, parts may be purchased with
a charge number. It seems to be impossible to pay cash or to use a student account though, so if you
tinker with electronics on your own, you’re out of luck here. An excellent range of resistors and capacitors
is available, along with basic digital logic, a few transistors and op amps, and an array of wire and cable.

If you want to get EE components for a personal project, or if you need something not carried in
Phillips 301, you’ll probably need to go to a local store. Rad-Tronics at 1005 N. Cayuga St. (273-8026)
is a good bet. While the shop is little more than a garage and business hours are limited, the stock is
phenomenal and the owner, Tito, is a character to match. For true-blooded electronics hackers, a visit
there is not to be missed.

**Chemistry Stock Room, G75 Olin Laboratory (D4)**

<http://www.chem.cornell.edu/kda1/stock.html>

The Chemistry stock room carries a range of chemicals, lab supplies, office supplies, and other items. The
stock room catalog is available on their webpage. They also sell $40 copy cards that you can charge directly
to your advisor’s research charge account and then use at photocopiers in the Cornell libraries.

**Physics Stock Room, Clark Hall (D4)**

If you can’t find what you need in the LASSP stock room or the Chemistry stock room, you should try
the Physics Stock Room in the basement of Clark Hall.

### 3.2.3 Biometry Statistics Consulting

The Department of Biometrics provides free statistical consulting to members of the Cornell community.
Members of the Department of Biometrics faculty are the main consultants and sessions are usually at-
tended by students who observe as part of their course requirements. Arrangements for continuing sessions
are made as needed. To make a consulting appointment contact Janet Breslin, 436 Warren Hall (E4),
via email (jlb9@cornell.edu) or go to their webpage at <http://www.biom.cornell.edu/consult.php> for
further information.

### 3.2.4 Imaging and Copying

Some departments or research groups provide in-house imaging services. Most departments provide local
photocopiers and a mechanism for charging work-related copies to the appropriate account. Ask your
advisor for information. Some advisors have their own photocopiers and prefer to have students use them.
Copies made as a teaching assistant can generally be charged to a class account, which the professor can
provide. You might also want to ask if you can get a personal copier code to use for your own course work.

If these resources aren’t available, or if you have more extensive needs than what your department
offers, there are other places you can go. Public photocopiers are available in the Engineering Library.
If you will be making many copies, there are cheaper places in Collegetown or downtown. Some of your
options are described here.
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Image Laboratory, Vet School (HJ4-5)

<http://imagelab.vet.cornell.edu>

The Image Lab provides graphics and imaging services to the Cornell University College of Veterinary Medicine and other departments in the university for a fee. Their services include digital photography, illustration, and reproduction of slides and other materials. If you’re presenting your research, they can print a really nice poster for you (they’ll even help you design it) but they can be very expensive. More information is available on their website.

CCMR Printing Facilities

The Cornell Center for Materials Research Computing Facilities in Clark Hall (D4) can print full-size, color posters for you on one large sheet of paper. Their web page as a full description of the equipment they have, along with the contact information: <http://www.ccmr.cornell.edu/ccmref/ccmref_overview>

Library Copy Centers

<http://www.library.cornell.edu/Adminops/ccenter.html>

In the basement of Olin Library, there is a convenient and cheap copy center that provides several services including binding, photocopying, laminating, and note pads. Bindery services, including stapling, collating, padding, folding, cutting, etc., are available for an additional small fee. They have the ability to copy books, transfer records from microfilm or microfiche to paper, prepare labels (dry gum and adhesive), laminate, spiral bind and produce oversize copies.

Mann library also has the resources to print out posters on one large sheet of paper. You only need to bring your file on a zip disk (100 MB, not 250 MB). The print quality is good and the price is very reasonable ($3 per foot).

Library Copiers

All of the Cornell Libraries, including the Engineering Library, have photocopiers that can be operated either with coins for $0.12 a copy or copy cards for $0.10 a copy. You can purchase copy cards at machines in the library. You can also go to the chemistry stock room in Baker (CD3-4) or to the Eastern Copy Products office (5-4663) in 279 Clark Hall (D4) and purchase a copy card on a research charge account. This option is very useful if your advisor is willing to pay for copies, since it allows you to copy articles in the library without paying for them yourself.

Copying facilities, local stores

There are several other copying facilities in Ithaca that are also convenient and easy to use, and may even be less expensive for some jobs. The closest copy stores to campus are Gnomon Copy (273-3333) on Eddy St. and KC Copy (272-6525) on Dryden Rd. You can also get copy jobs done at Staples or OfficeMax on Rt. 13 S. or at Kinkos on State St.

3.2.5 Computing

Personal computers are essentially office furniture today, and many research groups will provide a personal computer for each of their M.S./Ph.D. students. Some professors will even buy their students computers for their office, so let your advisor know if you have computer needs. Cornell Information Technologies (CIT) provides extensive computer labs and computing services around campus, and many departments have labs for undergraduate courses and/or graduate student research as well.
3.2.5.1 Computer Labs

<http://www.accel.cornell.edu>

The Academic Computing Center (ACCEL) is the newest and largest public computer lab on the Engineering Quad. It has four classrooms with a total of over 80 workstations. Center resources are available to the Engineering community and the general Cornell community for scheduled instruction and walk-in use. Also, a seven seat lab, the Yellow Room, can be reserved for small group sessions. Machines have Windows NT and Linux available, with a wide selection of software for engineering and general purpose computing. Accounts on these machines are freely available with on-the-spot registration for accounts.

For general information about other CIT labs across campus see <http://www.cit.cornell.edu/labs/labs.html>.

For more information about department computing facilities, ask your advisor or other graduate students.

3.2.5.2 NetIDs and the Campus Network

All Cornell students - undergraduate, graduate, and professional students - are assigned a Cornell NetID. This four to six character alphanumeric code is your unique Cornell identifier. Unlike your Cornell ID number or your Social Security number, your NetID is public. You'll be asked to use it to identify yourself for a range of purposes around campus.

Your NetID is your username on the Cornell computer network. When someone searches for you on in the Cornell directory, your NetID plus “@cornell.edu” (e.g. abc123@cornell.edu) is the e-mail address that will be given by default. Furthermore, Cornell, and the College of Engineering in particular, use this e-mail address to send out important announcements. You should make sure that you check your e-mail here on a regular basis. If you are given a separate e-mail account by your department, you should check both addresses; you will probably want to forward the e-mail from one account to the other.

Finally, you will need your NetID to access Cornell’s Bear Access and Just the Facts systems. Bear Access allows you to send e-mail, access the web, search the library card catalog online, and connect to Just The Facts. Just The Facts lets you check your registration status, bursar bills, and transcript, pre-enroll for classes, and change your mailing address, permanent address, and summer address listings. Bear Access and Just The Facts are installed on the computers in all of the CIT public labs.

For these reasons, it is important for you to find out what your NetID is. The easiest way to get your NetID is to go to the walk-through registration for new grad students at the Field House. Look for the table where they are handing out NetIDs and passwords. If you miss walk-through registration, or want to get it before then, you should go to the first floor of the Computing and Communications Center (D4). Wherever you pick up your NetID and password, you will probably be urged to take the CIT computer training. This one-hour class used to be obligatory, but it isn’t any longer. Most graduate students who have been using e-mail and computer networks for several years don’t find it useful. If you choose not to take it immediately, CIT offers this and other workshops (such as how to design a webpage) for free at other times throughout the year. You can also get information about using the Cornell network, Bear Access, and other CIT resources at the CIT web page: <http://www.cit.cornell.edu>

3.2.6 Thesis Binding

Once you’ve completed all your thesis/dissertation work, you’ll likely want to bind it as a hardcover book. (If you’ve written a master’s thesis, you’ll actually be required to submit two bound copies to the Graduate School. Doctoral dissertations must be submitted unbound, but you’ll probably want to bind at least one copy for your advisor.) There are several ways to bind your completed work, and they vary in cost and time required.
CHAPTER 3. WORK AND STUDY AT CORNELL

One option is to go to a place like Kinko’s (605 W. State, 272-0202) to have all the photocopying and binding done at one location. Just bring them the original document, and they will photocopy the additional copies and do the hardcover binding. Gnomon Copy (407 Eddy, 273-3333) has a similar service, except that they send out the binding to another business (Page Book Bindery — see below) rather than doing it on the premises. This one-stop-shopping is convenient, but it is more expensive.

Another (often cheaper) option is to have the photocopying done at one location and the actual binding at another place. Several places that provide photocopying include Gnomon Copy, WordPro (410 E. Upland, 257-0700), and Staples (Rt. 13 South, by K-Mart, 272-0240). The primary local business that provides hardcover binding is Ridley’s Book Bindery (2345 N. Triphammer, 257-0212), and they have turnaround service in as little as one day (though you’ll have to pay a little more!) Page Book Bindery used to be in Ithaca, but they have recently moved to Jacksonville; if you want to make the drive, call for directions (387-4387).

Remember that all copies of your work that you submit for official purposes must be photocopied on archival paper, so be sure to request it. You can save money on versions for yourself and family by photocopying them on standard paper and binding them with softcovers, but after spending so much time and money in graduate school, the extra splurge for archival paper and hardcover binding may well be worth it. If you are including any out-of-the-ordinary features such as fold-outs, color pages, or a back cover pocket, you might want to call around to comparison shop.

3.3 Funding

There are three major ways that graduate students get funding for graduate school: teaching assistantships (TAs), research assistantships (RAs), and fellowships. The obligations associated with each of these funding sources are described in Chapter 1. In this section we will discuss some of the issues involved with getting and handling these three types of fundings. If you are in a special funding situation, some of this information may still apply to you, but you should consult your field’s graduate office or your funding source for specific information.

3.3.1 What Funding Covers

TAs, RAs, and almost all fellowships will cover the cost of your tuition and your stipend. The amount of stipend that you receive will depend on the specific fellowship you have, grant that your RA falls under, or teaching obligations. Most fields determine their grad students’ funding situations on a semesterly basis. If you have a TA or RA, then the graduate field is required by the university to provide you with a letter informing you of the source and quantity of your funding. If you do not get this information, you should ask your advisor and/or your Graduate Field Advisor.

TAs last for one semester. RAs are usually only committed for one semester at a time as well. Fellowships may be for a single semester, or an entire year, though most often they cover tuition for the fall and spring and your stipend for nine months. If you want to stay at Cornell during the summer, there are many TA and teaching positions available and faculty can fund students on RAs over the summer as well.

Some funding sources will cover things besides your tuition and stipend. Many engineering graduate students get their student activity fee paid for them. Students who are “fully funded” (most graduate students who receive tuition and a stipend are considered “fully funded”) will also have their mandatory health insurance premiums covered by Cornell (see Section 4.6.5 for more information on health insurance requirements at Cornell). Some fellowships, and some grants that RAs are under, can cover the cost of traveling to conferences or purchasing equipment. You should check if these things or anything else are covered for you.

About a month before the start of each semester, you may receive a bursar bill with the total amount of your tuition listed as due. Do not panic! If you have funding, you do not have to pay this (though if
3.3. FUNDING

you have other charges that you are responsible for on the bill, you should pay those). The bursar office
sometimes bills for tuition before the process of paying your tuition via a fellowship, RA, or TA has begun.
This bill will also have your student activity fee listed on it.

It is quite possible (and perhaps even likely) that your tuition will not be paid before registration begins.
You cannot register unless your tuition is paid. However, it is very important that you are registered since
this maintains your student status, allowing you to use university resources and the health center, and also
maintains international students’ visa status. If your tuition is not paid, when you try to register you will
be told to go to the registrar’s office in Day Hall (C5). Once there, the registrar’s office will tell you that
the bursar’s office has a hold on your account and will send you there. The bursar’s office can release the
hold on your account — you need to tell them how you are supposed to be funded and the name of your
department’s contact person (usually the GFA). They will send you back to the registrar’s office, and they
will let you register.

When your next bursar bill arrives, it should show that your tuition has been paid. If it does not, then
contact your GFA or funding agency and let them know about the problem. You should also check at this
point that your student activity fee has been paid, if appropriate. You will probably have accrued some
finance charges as well at this point. Any charges due to late payment of your tuition can be removed; ask
your field’s GFA to take care of this for you.

3.3.2 Getting Paid

How often you get paid will depend on your funding source. TAs and RAs get paid every other week
during the semester. Fellowships are sometimes paid out every other week, but often you get paid your
entire stipend for a semester at the beginning of that semester. If this is the case, remember to manage
your money carefully since it will have to last you for several months!

If you do nothing, you will get paid by check. RA and TA checks will be delivered to your department.
They may be put in your department mailbox, or you may have to go pick them up at the Graduate Field
Office. Most people find it more convenient to have their paychecks directly deposited into their bank
accounts. It is very simple to sign up for this. You just need to fill out a “Payroll Electronic Deposit
Authorization Form.” They are available from the Payroll Office in East Hill Plaza, or you can download
one off the web at <http://www.universe.cornell.edu/payroll/home.html>. You then return the form to
the payroll office and by your next pay cycle your deposit will be made directly into your account. You
do not have to notify your bank that you have signed up for direct deposit. If you want to specify a
split of your deposit between the savings and checking portions of an account, you should contact your
bank for assistance. You cannot split your deposit among multiple banks. Direct deposits can be made to
any financial institution within the United States; all of the banks within Ithaca support direct deposits.
Deposits will be made on Thursdays of each pay week.

If you use direct deposit, you will receive notification of every deposit made to your account, rather
than receiving the checks. These “pay advices” will be sent to the same mailbox or person that your
paychecks were sent to. You should look at your pay advices to make sure that you are being paid the
right amount, and that taxes are being withheld correctly.

If you are on a fellowship, particularly one that pays your stipend once a semester, then to institute
direct deposit you must fill out a form at the Bursar’s Office in Day Hall. If you choose not to have your
fellowship direct deposited, then you will have to pick up your check from the Fellowship Office in Caldwell
Hall (DE4) and deposit it yourself. When your stipend check is ready, you will see an item listing your
stipend as a credit to your account, with a balancing item in the debit column of the bill. It is usually
accompanied by a note in the margin saying that you can pick up your check in the Fellowship Office
in Caldwell Hall (DE4). Last year (2001-2002) was the first year that direct deposit was available for
fellowship checks, so the process for getting them deposited directly is likely to change.
3.3.3 “Extra” Funding

Some graduate students get funding beyond their TA, RA, or fellowship by doing extra work. Often, the extra funding is from teaching some or part of a course while on an RA or fellowship. However, most fellowships and some RAs limit how much time you can spend in other employment, or how much supplemental money you are allowed to earn. If you are on a several-year fellowship and you want to TA before it is over, you can usually defer a semester of your fellowship for a year, allowing you to be funded as a TA for a semester without losing your fellowship. You may also be able to get creative, doing research or teaching work for a faculty member in return for new equipment for your office or some other compensation. Just be careful to check on the rules governing your funding before you agree to do work for extra funding.

3.3.4 Taxes

There are as many different tax situations as there are people, so this is just a broad overview of some of the issues to be aware of when paying taxes as a graduate student. As far as we are aware, the money from standard TAs, RAs, and fellowships that is used to pay your tuition is not taxable. However, you are responsible for paying taxes on your stipend. If you are paid by the payroll office (if you receive bi-weekly checks or direct deposits) then you will probably have federal and state taxes withheld automatically. If you are an international student, though, this may not happen. Similarly, if you are on a fellowship, you will not have taxes withheld.

If you do NOT have taxes withheld, you need to pay estimated tax to the IRS four times a year. The estimated tax forms (which should have a name like 2002 Form 1040ES) are available online at <http://www.irs.ustreas.gov> (other IRS forms and publications are available here as well). If you do not make estimated tax payments, you may find yourself paying large penalties when you file your taxes in April.

The Payroll office (H7) has an information filled page with documents on how to understand your W–2, and a wealth of information about student tax issues, including issues for international students: <http://www.univco.cornell.edu/payroll/home.html>. If you have questions this is a good place to look (you’ll have to scroll past links to information on staff and faculty benefits to get to the student information, but it’s worth it).

3.4 Purchases and Reimbursements

If you are doing research, particularly as part of an RA but also for your thesis, most of your work expenses can probably be paid for by your advisor. Depending on what you are purchasing and where, you may be able to charge the expense directly to your advisor, or you may have to get reimbursed.

3.4.1 Research Grant Charge Numbers

If you are buying supplies from the campus store on behalf of a research group or your advisor, you might be able to use a Cornell group charge code (availability of these codes, and what they can be used for varies from group to group). Each research grant handled by Cornell, such as an NSF grant, is assigned a charge number, typically of the form Exx–xxxx, where each “x” is a digit. If you have such a code, rather than paying you just tell the cashier you are charging it to a group and give them that number, your name and office/lab phone number, and your Cornell ID card. Purchases can be charged to a grant at the campus store and various shops on campus, such as those described in Section 3.2. Ask the faculty member for permission for each purchase in advance, and keep careful track of the receipts. The faculty member should also tell you who to turn the receipts in to (usually either the department’s accounting office or the faculty member’s administrative assistant).
3.4. PROCUREMENT WITHOUT A CHARGE NUMBER

In some cases, you may have to make a purchase at a shop that does not accept research grant charge numbers. There are a couple of options in this case.

Many advisors have “procurement cards”; these are credit cards that charge directly out of their grants. If you are ordering something over the phone or internet, or if you can convince them to let you borrow the card, this is just as easy as paying with a regular credit card. However, you can only charge up to $500 at a time on a procurement card.

If you know in advance that you are making a purchase and have time to allow the university to process the paperwork, you may be able to get a purchase order. This basically allows your advisor to say their account will cover the purchase being made and then get billed for the cost. Purchase orders may not be an available option for all graduate students, though.

Finally, you can pay for your purchase yourself and then get reimbursed. If you do this, be very sure that the faculty member you are working for agrees to pay the expense, or else you could end up footing the bill yourself. It’s probably a good idea to double check the price first. Also, you will need to get a tax exempt form before making your purchase; Cornell and the research groups within it do not pay New York State sales tax, and you cannot get reimbursed for it. Show your tax exempt form when you make your purchase (they may or may not need to keep the form) and check to make sure the tax actually wasn’t charged. Keep the receipt, and submit it along with a reimbursement form to whoever the faculty member has handling their account. Reimbursement can take anywhere from two to six weeks to be processed.

3.4.3 Long Distance Phone Charge Numbers

The EGSA believes that all graduate student offices should have a telephone that permits free local calls, though we are aware that not all departments currently respect that opinion. Personal long distance calls generally require a phone card. If you make many research-related calls, your advisor should give you a seven-digit charge number. Dial 9 and the long distance number, and after the tone, dial the charge number. This charge number, in some departments, also acts as the charge number for sending faxes.

3.4.4 Paying for Travel

If you are traveling to a conference, particularly one where you are presenting a paper, you can often get your advisor to pay for the expense of the transportation, lodgings, conference registration, and even food while you are there. There are a variety of ways to handle this. Some advisors will allow graduate students to ask their administrative assistant to make travel arrangements. This is wonderful, because the administrative assistant can then charge these expenses directly to your advisor’s grant. If this option is open to you, you avoid having to pay these expenses out of pocket and wait to be reimbursed. You will still need to submit receipts for these purchases, though. If you make the arrangements yourself, just keep track of your receipts as with any other purchase you want to get reimbursed for. If your advisor will pay for your food, ask what the amount per day that you can get reimbursed is (there is usually a limit). Sometimes you can just get a per diem amount paid out to you in advance, which usually means you don’t need to keep track of food receipts.

If your advisor is not able to pay for you to go to a conference, you still might not have to pay for it yourself. The Graduate School offers travel grants to pay for transportation to conferences. Most grant applications that meet their eligibility requirements are funded. You must be a registered graduate student, have a paper or poster that you are presenting at the conference, and not have received a travel grant already during the previous cycle July 1–June 30 (except under extenuating circumstances). See the website cited at the end of this section for more information and the travel grant form. Be aware that applications must be received at least a month before the intended date of travel.
If you are on a fellowship, it may pay for travel to a conference as well. You should contact the funding agency, or check the materials they gave you, to determine what they will pay for and how to get reimbursed.

The Graduate School will also give some travel awards to pay for research-related travel within the United States. The grants are available only to students who have passed their A exam before the date of travel, and the travel must be dissertation related and several weeks or months in duration. If you need travel support to do research at a location outside the United States, you can also apply to the Einaudi Center at Cornell for funding. More information about research travel awards and online application forms are available at <http://www.gradschool.cornell.edu/grad/fellowships/trvlawards.html>.

3.5 Safety

3.5.1 Police

The campus police station is located in Barton Hall (D6) and is open 24 hours a day, 7 days a week. In case of emergency, you should call 911. The 911 system responds to medical emergencies, fires, and crimes in progress. Note that if you dial 911 by mistake, for example when trying to make an international phone call, do not hang up. Stay on the line until somebody answers, and then explain that you misdialed. Otherwise, the police may show up at your door to check on you.

For non-emergency situations, you can call Cornell security at 255-1111. Non-emergency situations that security will handle include reporting thefts or letting you into your office if you get locked out. For more information on the services they provide, you can visit their web page at <http://www.cupolice.cornell.edu>.

3.5.2 Blue Light Buses

Blue Light buses operate daily from 6:30 PM to 2:30 AM except during the week between Christmas and New Years. They are free to anyone with a Cornell ID and cover most of campus and adjacent areas. For routes of blue light buses, check out routes 92 and 93 on the website: <http://www.tcatbus.com/>.

There is also a bus route (route 12) which runs between Cornell and downtown at night, but you’ll have to pay the fare unless you have a bus pass.

3.5.3 Blue Light Escorts

The Blue Light escort service provides night escorts around the Cornell campus and the closely surrounding area. Escorts are paid and trained students. An escort can be requested by calling 255-7373 or using a blue light phone between 8:30 PM and 1:00 AM 7 days a week during the fall and spring semesters. Patrols include central campus, Collegetown, North Campus, and Cayuga Heights. Originally funded by a $2500 gift from the class of 1982, the program has since been sponsored by the Cornell University Police.

3.5.4 Blue Light Phones

Blue Light telephones are emergency phones with direct lines to Public Safety. They are scattered around campus, each marked by a blue light. There are also phones located inside some buildings with emergency stickers on them. In all, there are 73 Blue Light phones outside buildings, another 199 inside, and 40 entry phones with public safety buttons. If you pick up any of these phones, you will be immediately connected to the CU police, who can deal with an emergency. You can use these phones in non-emergency situations as well, such as if you are lost, your car broke down, etc.
3.5.5 Lost and Found

Many individual buildings have their own lost and found areas, but if an item is not reclaimed from any of these, it will eventually find its way to the CU police lost and found located in Barton Hall (D6). If you have lost an item, you can contact them at 255-7197 or email lostandfound@cornell.edu.

3.6 Organizations at Cornell

3.6.1 Graduate and Professional Student Assembly (GPSA)

The Graduate and Professional Student Assembly is the student government for graduate students at Cornell; their webpage is located at <http://www.assembly.cornell.edu/GPSA>. The Council of Representatives is composed of a representative from each of the majors within the Graduate School. From this Council a total of 15 people are elected to serve on the actual Assembly which is the voting body of the student government. One of the primary responsibilities of the GPSA is to set the Graduate Student Activity Fee, which is used to fund campus activities. A branch organization of the GPSA is the GPSA Finance Commission (GPSAFC). This organization is responsible for the direct administration of funds to graduate student groups.

The GPSA is a member of the National Association of Graduate and Professional Students (NAGPS). NAGPS offers many benefits for graduate students. These benefits include health insurance, dental insurance, a job bank, student discounts, and much more. See their web page at <http://www.nagps.org> for more information.

3.6.2 Engineering Graduate Student Association (EGSA)

<http://www.egsa.cornell.edu/>

The Engineering Graduate Student Association (EGSA) is a volunteer graduate student organization that partners with the administration, faculty, and staff of the College of Engineering at Cornell to enrich graduate student life and build community across graduate fields. EGSA was created to provide a unifying representative body for the engineering graduate student population and in turn, the EGSA evolved into a focused planning board for graduate activities. The EGSA maintains a presence within the College of Engineering by sponsoring many activities designed specifically to bring together engineering graduate students. EGSA events are open to all Engineering graduate students, researchers, and faculty. These activities include monthly seminars, professional development workshops, contests, picnics, and study breaks. We represent graduate student concerns to the College and the Engineering departments by serving on committees and issuing position statements. We also help organize the Engineering Graduate Student Orientation and compile this handbook. The EGSA supports several pilot projects within the College and represents graduate student interests to the College and University. If you would like to have more information about the EGSA and our activities, please visit our website or email us at egsa@cornell.edu. We operate two listservs to keep people informed of EGSA events. For general information and announcements, subscribe to EGSA-L@cornell.edu. For more detailed information and discussions about planning EGSA activities, subscribe to EGSAMEMBERS-L@cornell.edu. (For detailed instructions on subscribing to these lists, see our webpage.)

3.6.3 Teaching Outreach

The Graduate Student School Outreach Project (GSSOP) provides graduate students the unique opportunity to teach mini-courses at local elementary and secondary schools. Annually, about 20 graduate students representing a wide range of fields such as architecture, literature, engineering, physics etc. participate in
this project. An example of a recent engineering mini-course was an introduction to modern telecommunication for high school students. Each mini-course is typically 6-8 sessions. The participating graduate students receive an honorarium of $250 and reimbursement for travel and material expenses. The following is a quote from the project description:

Graduate students report benefiting in a wide variety of ways by participating in the program. Students find that breaking down their area of expertise for elementary, middle and high school students and collaborating with the teachers, actually enhances their own understanding of their subject. The program provides an opportunity for students to make a positive contribution to the community. As one graduate student stated, ‘Perhaps the biggest benefit to me is when I can tell that I’ve reached a student.’ In addition, graduate students inspire grade school students by exposing them to particular fields and related careers, while allowing teachers to expand their own knowledge and incorporate new information and activities into their curriculum.

Applications including mini-course proposals are typically due in late fall, around November. There is an informal interview, and then the proposals are sent out to teachers in Ithaca area schools. If accepted, all mini-courses are offered during the spring semester. For more information, contact Lora Levy, Literacy and School Programs Coordinator, Cornell Public Service Center, 200 Barnes Hall (ll4@cornell.edu, 255-0255).

3.6.4 Area-specific Professional Societies

There are some professional societies with chapters on campus. Often, these organizations are organized and administered by undergraduates, but being involved with these organizations as a graduate student can be very beneficial.

American Institute of Aeronautics and Aerospace (AIAA)
American Institute of Chemical Engineers (AICHE)
American Society of Agricultural Engineers (ASAE)
American Society of Civil Engineers (ASCE)
  <http://www.cee.cornell.edu/ASCE>
American Society of Mechanical Engineers (ASME)
  <http://www.rso.cornell.edu/ASME>
Institute of Electrical and Electronics Engineers (IEEE)
  <http://www.ece.cornell.edu/ieee>
Materials Research Society (MRS)
  <http://www.mrs.org>
Society of Automotive Engineers (SAE)
  Tau Beta Pi (National Engineering Honor Society)
  <http://www.engineering.cornell.edu/studentServices/irs/eslc/tbp>

There are also some local engineering oriented organizations:

Agricultural and Biological Engineering Graduate Student Association (ABEN-GSA)
Biomedical Engineering Society
  <http://www.rso.cornell.edu/bmes>
Cornell Engineering Physics Society (CEPS)
Earthquake Engineering Research Institute (EERI)
  <http://www.eeri.org>
Engineering Student Council (ESC)
<http://www.engineering.cornell.edu/esc>
Engineers Without Borders
<http://www.engineering.cornell.edu/esc/ewb-issf>
Structural Engineering Club

A website maintained by the ES LC lists and contains contact information for most of the engineering groups at Cornell: <http://www.englib.cornell.edu/coe/eslc/general_info/organizations.html>.

3.6.5 Support/Networking Organizations

The College of Engineering has created two offices, the Minority Programs in Engineering Office and the Women’s Programs in Engineering Office. These programs provides support and encouragement, advocacy and friendship to the community of women and minorities in the Engineering College. They serve undergraduates, graduate students, post-docs, lecturers, and faculty. In so doing, they seek to improve the professional, academic and social climate for all members of the Cornell Engineering community. Their objectives include:

• to celebrate and promote respect for individual perspectives, experiences and expertise
• to provide services such as advising, leadership and professional development, and academic support
• to help students navigate the College and University to maximize their academic experience
• to create and promote activities and events that bring together women and minorities from the various segments of our community in meaningful ways
• to provide support and advice to College and University leadership on climate and community-building issues
• to serve as advocates for our constituency

The Women’s Programs in Engineering office also maintains the Women in Engineering Resource Room in Carpenter Library.

There are a number of other organizations which offer support to engineers, and to minority engineers in particular. Almost all of the events of all of these organizations are open to any member of the Cornell community.

American Indian Science & Engineering Society (AISES)
<http://www.rso.cornell.edu/caises>

Cornell has an active AISES chapter that sponsors a number of both cultural and support activities throughout the year, including recruitment efforts for high school students and an annual Pow Wow and Smoke Dance Competition.

Cornell Society of Engineers (CSE)
<http://www.engineering.cornell.edu/alumni/>

The CSE is the College of Engineering alumni group. As well as coordinating alumni fund-raising for the College they sponsor an annual Engineering Conference, bring alumni back to Cornell to give seminars, and facilitate contacts between alumni and Cornell faculty.
National Society of Black Engineers (NSBE)

The NSBE work to stimulate interest in engineering and increase the enrollment of black students in engineering programs.

Out in the World (OIW)

OIW is a social organization for gay, lesbian, and bisexual students at Cornell. They organize monthly coffee hours at the Big Red Barn and hold other social events throughout the year.

Queer Association of Scientists and Researchers (QuASAR)

QuASAR is a new organization designed to support gay, lesbian, and bisexual graduate students in the sciences at Cornell. Several events are planned throughout the year to provide opportunities and support for members of the Cornell Community.

Society of Hispanic Professional Engineers (SHPE)

The SHPE works to advance Hispanic representation at Cornell and to help Hispanic students succeed at their academics and in their future careers. They sponsor workshops, seminars, and social activities.

Society of Women Engineers (SWE)

The Society of Women Engineers was founded at Cornell University and the tradition of serving the female engineering students continues to this day. Monthly meetings are held and seminars convene on topics specific to the interests of women in engineering. The Cornell Student Section of the Society of Women Engineers promotes women in engineering by advocating the importance of diversity and by uniting resources to encourage academic, leadership, professional, and personal excellence for the entire engineering community of today and tomorrow.

Women in Science and Engineering Resource (WISER)

The WISER Center is a mentoring center staffed by women upperclassmen, graduate students, and postdocs, focused on supporting women in their first two years of science. Their activities include sponsoring lecture symposiums and holding tours of research laboratories.

3.6.6 Resources for Women

Besides the resources for engineering women described in the previous section, the University runs the Cornell Women’s Resource Center (<http://www.arts.cornell.edu/wrc>) in Willard Straight Hall. They run seminars and have a lending library to educate the Cornell community about women’s issues and promote awareness and activism. They can also help you find out about or get involved with resources and programs for women around Cornell and Ithaca.

One example of a useful women’s resource that Cornell supports are the new lactation rooms for nursing or pumping. One such room exists in basement of Baker Laboratory, and five more are being created around campus, including on the Engineering Quad. You can find out more about this another ask about other resources by contacting the Women’s Resource Center, or signing up for their listserv to get regular announcements of their activities.
3.7 Getting Help

Graduate school, like anything, has its occasional rough spots. You may have questions about meeting program requirements, your funding situation, working with an advisor or in a research group, or getting a job after grad school. Most graduate students get frustrated with their research at times, and many graduate students wonder if they should stay in graduate school when things get difficult. There are a number of people that you can talk to who can help solve your problems or gain perspective. The most important thing is to talk to somebody when things are going badly, even if it is just a friend or family member. Graduate school only becomes harder if you isolate yourself.

3.7.1 Office of Research, Graduate Studies, and Professional Education

The Office of Research, Graduate Studies, and Professional Education, located in 146 Olin Hall (C5-6), is responsible for the academic oversight and support of engineering graduate programs, leadership toward expanding professional education, services to graduate students and graduate fields, and the college-level efforts in research resource development.

Graduate students should feel that the Office is their “one-stop” shop for information, venting concerns, and or asking a quick question when navigating their way around Cornell. Office hours are from 8:00–4:30, M–F, 255-7413. Their web page is at <http://www.engineering.cornell.edu/grad>.

3.7.2 People to Turn To

The following list of people and offices are available to help graduate students with different types of problems. Not all of these resources are necessarily right for everybody. It’s important to find someone who can help you, and who you are comfortable approaching with your problem. These are just some suggestions:

**Your Advisor** The most obvious person to talk to when things are going badly is your advisor. They can suggest classes to take, let you know what conferences and journals you should be keeping track of, and give you general information about the resources available for grad students in their research group. If you’re getting stuck in your research, they can help get you back on track, or spot what you are doing wrong. They are also a good person to talk to about possible funding problems. They can also be a good resource for feedback on career decisions.

**Your Advisor’s Administrative Assistant** If you have simple questions about paying for research equipment or photocopies, arranging for travel to conferences, or other administrative questions, your advisor’s administrative assistant may be able to help you out.

**Other Committee Members** The other faculty on your committee may also be able to give you useful information, similar to what your advisor can help you with. It is valuable to get perspectives other than your advisor’s on the research process and your field. If you are having problems with your advisor, particularly with regards to your A exam or your B exam, your committee members may be able to help mediate.

**Other Faculty in the Department** Even if they aren’t on your committee, many faculty are happy to talk to graduate students in their department, particularly about their research. If you are having trouble with your research group, other faculty in your department may be able to make suggestions or even help you find a different project.

**Other Faculty in the College** Talking to faculty outside your department can offer opportunities to make research connections across fields, which can reinvigorate a research project or help you find
new people to collaborate with. You may be surprised how similar the research done in different departments can be.

**Director of Graduate Studies (DGS)** Each graduate field has a Director of Graduate Studies who is in charge of graduate student admissions and administration of the graduate students after they arrive. They keep track of your progress through the program, and sign off on important forms for you along the way. This makes them a natural person to talk to if you are having trouble finding an advisor, or making progress with your current advisor. They also often keep track of fellowship information for your field. In some departments, the DGS acts as an advisor for students who do not yet have a research advisor.

**Graduate Field Assistant (GFA)** The assistant to the Director of Graduate Studies is the Graduate Field Assistant. They can help with many of the things that the DGS office handles. The GFA also is often the right person to talk to about problems with your bursar bill or getting your stipend.

**Chair/Director** If your field is part of a department or center, the chair or director is another person you can approach if you are not able to approach or find a solution to your problem with your advisor or the DGS.

**HR Director** Some departments have a Human Resources Director who is available to talk to graduate students as well as staff members in the department. If your department has one, you can ask if they are a resource for grad students as well. If you’re having what seems like an “employment” problem, such as with funding, department provided resources, or conflicts with someone you are working with, they may be able to help.

**College of Engineering Administration** There are a number of people in the College who are available to help graduate students. If you are having serious problems with your advisor, your committee, or your department and you need advice, this is a good place to go. You can get assistance in mediating with your advisor or committee if necessary, or advice on how to deal with them yourselves, or on getting out of your situation. You can also get assistance here with problems you might be having at the University or Graduate School level.

**Safe Havens** In order to sustain a community where students, staff, and faculty can all succeed, the College of Engineering is training members of the College community to act as safe havens. Safe havens are trained to help resolve conflicts and formulate positive actions that can be taken to counter problems. Conversations with safe havens are confidential unless they discover evidence of illegal activity or possible risks to an individual’s physical well-being. Safe havens are being solicited from a range of departments and positions within the College. You are welcome to contact any safe haven, not just ones within your department; in some cases, you may prefer to talk to someone outside of your work environment. You can get a current list of safe havens from (<http://www.engr.cornell.edu/grad/safehaven/>).

**Dean of the Graduate School** The Dean of the Graduate School, currently Dean Alison G. Power, can help handle problems that are occurring at the University level. If you have questions or concerns about the Graduate School and aren’t sure if they are important enough to go to a Dean with, you can talk to Dean Power informally at his weekly open lunch in the Big Red Barn. These lunches are held during the academic year and the date and time is listed in the graduate bulletin, in the Cornell Chronicle, and on the Graduate School web page (<http://www.gradschool.cornell.edu/>).

**University Ombudsman** The University Ombudsman’s office hears and investigates complaints about the operation of the University, especially complaints of injustice and the abuse of power. The office’s
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The main purpose is to provide resolution of conflicts within the university, ensuring that all parties involved are handed with equitability and due process. Its services include providing information on University policies and practices, helping examine alternatives, finding proper authorities to resolve situations, or otherwise seeking a resolution to problems. All communications with the Ombudsman are confidential. The office has the power to access any official files and information needed to resolve a given situation.

**Gannett** The Gannett Health Center offers a variety of psychological and counseling services, many of which are free. They are described in detail in Section 4.6.4. If you’re feeling overwhelmed, but don’t have a specific problem that needs to be solved, or if you are suffering from other pressures in your life, they offer a confidential outlet to talk about your situation, and can often help you make plans to get a handle back on things.

**International Students and Scholars Office (ISSO)** For all of the difficulties of being a graduate student, there are a host of unique problems that international students face. The ISSO works to help international students adjust to living in the United States and advising them on immigration, employment, and other administrative issues. They have an extensive web site (<http://www.isso.cornell.edu>) and you are also welcome to go to their office to talk to them in person.

**Student Groups** If none of these resources seem like the right place for you to turn to, there are a number of student groups that you may want to talk to. A number of support and networking organizations are listed in Section 3.6.5. Groups for international students from particular countries are mentioned in Chapter 5. These groups, and others such as the Engineering Graduate Student Association, give you an opportunity to meet with other grad students. Often, you’ll find that other people have faced similar problems, and they may be able to give you suggestions, or at least point you to the right person to approach about your problem. And if you are just feeling frustrated, whether about research, your advisor, the Ithaca weather, or something else, having an understanding ear to gripe to can make you feel less alone or overwhelmed.