

# Stanford University



## Department of Energy Resources Engineering

### Graduate Student Handbook

### 2018-19

**Stanford** |  
SCHOOL OF EARTH, ENERGY & ENVIRONMENTAL SCIENCES | Energy Resources  
Engineering

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## Department of Energy Resources Engineering (ERE)

# WELCOME

Welcome to the 2018-19 academic year at Stanford University and to the Department of Energy Resources Engineering (ERE).

This handbook lists the various requirements, policies, practices, and procedures that are necessary for you to complete your degree and to make effective use of the resources in the ERE department.

The information in this handbook should be considered supplementary to, but not superseding, the information contained in official University publications and the Bulletin. In the event of differences, the University policy takes precedence unless explicitly noted in the text of this handbook. We intend to keep this handbook updated, and your suggestions as to how it can be made more helpful would be appreciated.

We are pleased to have you at Stanford, and we wish you great success in your studies. We hope that your experiences at Stanford will contribute not only to your technical excellence, but also to your personal development. The faculty and staff are ready to be of service to you.

Hamdi Tchelepi  
Professor and Chair,  
Department of Energy Resources Engineering,  
September 2018.

Dear New Students,

Welcome to the Department of Energy Resources Engineering. We are glad that you have arrived safely. I think you'll find that this is a great place, with top-notch faculty, up-to-date facilities, and a knowledgeable administrative team to support your academic needs.

You've no doubt already met the Department Chair, Hamdi Tchelepi, and will meet the rest of the faculty shortly. Let me "introduce" you to the administrative staff. Our administrative staff is organized into three teams:

**Student Services Team:**

**Arlene Abucay**, Student Services Program Manager. Undergraduate, co-term, post-doc and visitor programs; student events (recruiting, Admit Day, graduation lunch, etc.); course scheduling, and the Department's Bulletin information. Arlene is in Green 099, phone 8-9339, e-mail aabucay@stanford.edu.

**Diane Cisneroz**, Office Manager/Student Services Assistant. Keys, office equipment and supplies, space, student events, safety compliance. Diane is in Green 050, phone 5-2716, e-mail dlarsonc@stanford.edu.

**Joanna Sun**, Assistant Director of Student Services. Graduate student degree progress, academic policies, funding issues, etc. Joanna is in Green 097, phone 3-8314, e-mail joannac@stanford.edu.

**Finance Team:**

**Yolanda Banks**, Grant & Finance Manager. Battiato, Horne, Kovscek, Onori, Orr, SUPRI-A, SUPRI-D and Geothermal. Yolanda is in Green 063, phone 5-2721, e-mail yolandad@stanford.edu.

**Stephanie James**, Research Group Assistant. Mukerji, SCERF and SUPRI-Tides. Stephanie is in Green 019, phone 3-1456, email smathewsames@stanford.edu.

**Thuy Nguyen**, Grant & Finance Manager. Aziz, Benson, Brandt, Durlflosky, Gerritsen, Tartakovsky, Tchelepi, EAO, SCCS, Smart Fields, SUPRI-B. Thuy is in Green 061, phone 5-2725, e-mail ttnguyen@stanford.edu.

**Event/Communication/Website Team**, also responsible for **Purchasing/Travel Reimbursements:**

**Samantha Mickens**, Event Coordinator/Web Manager. Events & websites for Aziz, Benson, Brandt, Durlflosky, Gerritsen, Tartakovsky, Tchelepi, EAO, SCCS, Smart Fields, SUPRI-B, and the main ERE Department site. Sam also processes purchasing and reimbursement requests for these research groups. Sam is in Green 065, phone 5-9835, e-mail smickens@stanford.edu.

**Lyrissa Roman**, Event Coordinator/Web Manager. Events & websites for Battiato, Horne, Kovscek, Onori, Orr, SCERF, SUPRI-A, SUPRI-D, SUPRI-Tides and Geothermal. Lyrissa also processes purchasing and reimbursement requests for these research groups. She also coordinates the ERE Department seminars. Lyrissa is also in Green 065, phone 3-6849, e-mail lnroman@stanford.edu.

I am the Director of Administration and Finance and my office is Green 062, phone 5-2723, e-mail scosta@stanford.edu. I am responsible for the general well-being of the Department, both administratively and financially. The Department staff are good resources for information regarding the Department and the University, and will do their best to assist you. If they are not available, or you have a question or concern about the Department or University in general, please feel free to stop by my office any time. I look forward to meeting each of you. Have a great year!

Sincerely,

*Sandy Costa*

Director of Administration and Finance

# GETTING ORGANIZED

## AXESS/REGISTRATION ISSUES

### AXESS

Use AXESS to submit your study lists, adjust your tuition units, view your student bill, change your address, request transcripts, and see publicly available information such as housing resources and more. AXESS is available on the Web and has instructions for how and when to complete various AXESS tasks. Be sure to have your current local address and e-mail address updated at all times in AXESS. <https://axess.stanford.edu/>

### Health Insurance

If you already have health insurance, you must request a waiver for the university insurance, otherwise you will be charged for Stanford's student health insurance. If you don't have health insurance, you must pay this fee. If you are paid by the Department, the University subsidizes half of your student health insurance, so you should pay half of the health insurance fees before any deadlines as listed on the Stanford University calendar found on the Registrar's website.

### Study List

You must submit a quarterly study list by the deadline dates listed in the Stanford University calendar. Please remember to discuss your study list with your advisor at the beginning of every quarter. If you are being paid by the Department, you must enroll in 10 units approved by your adviser. These 10 units will be units that are included in your Program Proposals and Language requirement classes. The department will NOT cover any "recreational" subjects, such as athletics, art, etc. The study list is to inform the University exactly what courses you are taking in a particular quarter. You may enroll for your study list via AXESS. Please pay attention to the deadlines. Not only will fees be assessed, but for international students, you must be enrolled by the deadline date or face problems with your visa, including being asked to leave the United States.

## OTHER COMPUTER RESOURCES

### Computer Accounts

As soon as you arrive, you should make sure you have a computer account on the department computer domain. Our local network and computing resources will set up your account. You will need to provide your SUNet ID account information to set up the account. Fill out and sign the form entitled "Software Licensing and Use Policies on Department Computers" (the form can be found in your orientation packet, as part of your checklist).

### School of Earth, Energy and Environmental Sciences (SE3) Web Site

SE3 has current news and events in its website. Check this site often for up-to-date information concerning the School and the Department.  
<http://earth.stanford.edu>

### E-mail

You can check your email at [webmail.stanford.edu](http://webmail.stanford.edu). On your BPC in your office, the department has licensed the mail program Outlook. This is the only local mail program you should use on

your BPC (others are not secure). You can also view your Stanford email at [webmail.stanford.edu](mailto:webmail.stanford.edu) (without using Outlook). You have a Stanford email account based on your SUNetID (e.g. [yourname@stanford.edu](mailto:yourname@stanford.edu)). Administrative messages from the department and from the university will be sent there only. You will not receive Stanford emails at other email addresses that you may have (e.g. Gmail, etc.), unless you forward them.

Please make sure you are included in the ERE email lists for matriculated students to receive academic updates, deadlines and department events and announcements. Please contact Student Services to be added to the student email list.

### **Web Resources**

Many departmental computers open up to the Energy Resources Engineering Home Page:

<https://earth.stanford.edu/ere>

From here, you'll be able to find information on the department, faculty, research groups, schedules, and also some fun pictures. Check there for seminar schedules, time schedules, and department news. Look in the "current students" internal resources section for computer information, MS program proposals, etc.

The link to the Stanford University Home Page to find out about anything on campus (i.e. the Bechtel International Center, Career Development Center, Center for Teaching and Learning, and Disabilities Resource Center):

<https://vpge.stanford.edu/gradgateway>

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<https://rde.stanford.edu/>

This is the Housing and Dining Services web page which provides all types of housing information, including how to interview potential housemates, etc.

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<https://beam.stanford.edu/>

This page tells you all about Job Fairs. It lets you know who will be coming to recruit, what they are looking for, and what their residency requirements are. Please sign up for Handshake to participate in fall recruiting. For ERE recruiting information, please contact Arlene Abucay for details.

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### **Additional useful Stanford websites at the end of the handbook.**

#### **Computer System Information**

If you have any questions about the computer systems, check the department web page information. If your mentor or people in your research group can't answer your questions, then contact the Department systems administrator Eric Liu ([ericliu8@stanford.edu](mailto:ericliu8@stanford.edu)) for assistance.

### **TRANSPORTATION ISSUES**

#### **Parking**

A fee must be paid for all parking on campus. Parking regulations are strictly enforced. You can obtain information concerning eligibility, purchase parking permits, pick up public transportation maps and schedules as well as bike route maps in the Transportation Program office on Bonair Siding. If you're living off-campus, there is a program through this office called Clean Air

Credits where the University will pay you to not buy a parking permit. CalTrain runs between San Francisco and San Jose. The closest CalTrain stations are the Palo Alto station off Palm Dr. and the California Ave. station off California Ave in Palo Alto. Stanford's Marguerite shuttle provides free rides, both from and to the station. <http://transportation.stanford.edu/>

### **Bicycling**

It is the law that you have to register your bike. Register your bike in the Transportation Program office on Bonair Siding or at Tresidder. Lock your bike with a good heavy duty lock. Please note that many bikes are stolen on campus every day. Bikes are allowed on CalTrain. There is a local bike coalition list you can subscribe to by emailing [bike-coalition@lists](mailto:bike-coalition@lists.stanford.edu) then entering "subscribe" in the body of the message. <https://transportation.stanford.edu/bicycle>

### **Marguerite Shuttle**

The Marguerite Shuttle is a system of buses that go around the campus, to the train station in Palo Alto off University Ave. and to the train station in Palo Alto off California Ave. Marguerite also goes to Downtown Palo Alto over the extended lunch hour. Schedules and maps are available in the Transportation Office on Bonair Siding, on the buses, and on the Parking & Transportation web site: <http://transportation.stanford.edu/marguerite/>.

## **BANKING**

### **Bank Accounts and ATMs**

There is a Wells Fargo Bank office and a Stanford Federal Credit Union (SFCU) office located on the second floor of Tresidder. ATMs for Wells Fargo Bank, SFCU, and Bank of America are located on the second floor of Tresidder and a generic ATM is located in the Stanford Bookstore. You will need to open a checking account in order to manage your finances in this country.

For information concerning the Stanford Federal Credit Union:

<http://www.sfcu.org/>

For information concerning the Stanford Federal Credit Union for international students:

<http://www.sfcu.org/home/students>

For information concerning Wells Fargo Bank:

<http://www.wellsfargo.com/>

## **OFFICES/BUILDING INFORMATION**

### **Office**

Students are assigned an office space in the Green or Mitchell Bldg. There should be a desk and a chair for each student in the office, and telephone to share. If any of these items are missing, please email Sandy Costa at [scosta@stanford.edu](mailto:scosta@stanford.edu).

### **Keys**

Students may obtain keys from Diane Cisneroz in Green room 050 for the outside doors of the Building, specific rooms or laboratories to which you require access, and your office. There is a deposit of \$10.00 per key that will be refunded when the keys are returned.

## **Combinations**

Several offices in the Green building are equipped with combination locks. For the combination to the printer room (GESB 60), see Diane Cisneroz. Do not tell ANYONE the combinations to these rooms. The combinations are changed from time to time - new combinations will be announced at the weekly Monday seminar.

## **Locked Building**

We try to maintain a locked building after 5:00 p.m. and on weekends. This is for your own safety and security. It is less likely things will disappear if the building is kept locked and less likely some unknown person will be roaming the halls. We ask that you do NOT prop open the doors when the building is locked. Remember your keys. Make sure your office is locked when you leave for the day or for long periods of time. Many people do roam around the campus that do not belong here. It is also important to close and lock your windows at the end of the day and over the weekend. Break-ins have occurred, and things have been stolen from offices. If you find the copy room or department office open after 6:00 pm, please close the door and make sure it is locked - student checks and mail have been stolen from these rooms after hours.

## **Closed Doors**

Fire and safety regulations require that ALL LAB DOORS REMAIN CLOSED AT ALL TIMES. Also, air circulation through the building is more efficient if you do not have both your office door and your office windows open at the same time.

## **Mail**

Student mailboxes, for the receipt of interdepartmental notes and mail ONLY, are located in the basement of the Green Bldg. in the copy room (060). Do not use the department as a mailing address for personal items such as checks, driver's licenses, insurance forms, credit cards etc. THE U.S. POST OFFICE WILL NOT FORWARD MAIL THAT IS ADDRESSED TO A DEPARTMENT. (So when you leave, you will not get your mail.) Please get into the habit of checking your department mailbox because it is a good way for staff and other students to get in touch with you. There is a U.S. post office located next to the bookstore for your personal mailing needs, or you can leave stamped mail in the box in the department office. You can rent a post office box at the campus post office if you wish, and you can use this your entire time at Stanford University.

## **Our Address**

The Department address is: Energy Resources Engineering, 367 Panama Street, Green Earth Sciences Bldg., Room 050, Stanford University, Stanford, CA 94305. The Department phone number is (650) 723-4744, fax (650) 725-2099.

## **Smoking**

University and State of California regulations prohibit smoking in all public buildings, including offices, hallways, lavatories, and within 30 feet of any building. California has strict smoking regulations.

## **Copying**

There is a large copy machine available in the printer room (Green 060) for business use. You will receive a code that must be input before you can make copies. Do not share your code with anyone else. Codes are related to budgets, and should reflect copy use for each particular project. You will also have a code for personal use. Personal copying is considered any copies of personal items, such as a copy of your tax return that you make for yourself or copies of class materials you make for your own convenience and use. Departmental copying is if your instructor asks you to make copies of something for everyone in the class. We will bill you monthly for your personal copies. Ask your mentor or Diane to show you how to use the machine, or, if you have problems with it, see Diane in room 050 or Yolanda Banks in room 063. Report any malfunctions or need for service to them. Please make sure that the copy room is closed and locked after hours and on weekends to protect the items from theft.

## **Telephones**

Telephones are located in each student office and in some of the labs. When calling other phones on the University system (prefixes 723, 725, 721, and 497) you need only dial the last five numbers, such as 3-8314 for a telephone number of 723-8314. Off-campus numbers can be reached by first dialing a "9", and then the entire 7 digit number.

If an international call needs to be made for Department business, please see your research group administrator as the access codes are assigned to a particular project and the call will then be billed to that project's account

## **Fax Machines**

A fax machine is located in the Energy Resources Engineering department office, room 050. Students may use this fax machine; however, it is not available to send an international fax without a personal code which you will have to obtain. Instructions on how to send faxes are posted on the wall near the fax machine. The fax telephone number is: 650-725-2099.

## **Water, Refrigerator, Microwave**

There is a small kitchenette next to GESB014, which contains a refrigerator, a microwave and a toaster for department use. You may use this equipment. Please remove your old food from the refrigerator periodically so that there is room for everyone's fresh lunch, and clean up the microwave if your food overflows. Remember, no metal or foil in the microwave - it will destroy the functioning of the machine. Filtered water and ice are located in the hallway around the corner from the kitchen.

## **Coffee/Tea**

Coffee and tea for the ERE community is available in room 060. Instructions for brewing coffee are located above the machines.

## **Climate Control, Lights Out, etc.**

Too hot? Too cold? Furniture missing? Window or door problems? Please report office problems to Diane. Don't assume that someone has already reported the problem.

### **Scheduling Rooms**

The small meeting room in the basement (GESB 067) and the basement seminar room (GESB 014), and conference rooms on the third floor (GESB 361 and GESB 365) can be scheduled online on the SE3 website. <https://earth.stanford.edu/resources/rooms-resources>

Please check with ERE administration before making arrangements to use those rooms for any purpose.

### **Purchasing**

There may be times when you will need to purchase supplies for your experiments or lab. Please see your research supervisor and group administrator before making any purchases. It is important to have permission to use an account and the correct account number for all purchases. The research group administrator needs to account for all funds spent and will help you with the process of ordering at Stanford.

### **Building Maintenance**

Periodically, we will have fire drills, sprinkler system tests, chilled water or fume hood shutdowns. You will be notified when these are scheduled. It is important to take the appropriate actions when you are notified, or when an alarm sounds.

# STUDENT RESOURCES

## **GSAC**

There are two students elected each year to represent the Department of Energy Resources Engineering on the Graduate Student Advisory Committee (GSAC). The two GSAC reps communicate with the department and the graduate students about graduate student issues, help plan the department orientation, update the course comments on the web, and other important stuff.

## **Mentors**

Incoming students are assigned a mentor for their first year. Use your mentor to help you settle into the department and learn your way around.

## **SPE**

The Society of Petroleum Engineers has a very active student chapter at Stanford. We strongly encourage all of you to join. The SPE manages the Friday Social gatherings every week, as well as organizing other activities. Elections are held at the beginning of Spring Quarter.

## **"Friday Social"**

The student chapter of the SPE sponsors "Friday Beer" in the Arco Courtyard every Friday. Use this chance to chat with other students, faculty and staff in an informal and fun atmosphere. You do not need to drink beer. "Equally Attractive Non-alcoholic Beverages" are always available.

## **Bechtel International Center**

The Bechtel International Center runs a complete Orientation Program for international students. It is located at 538 Lagunita Dr. We strongly encourage international students to attend this Orientation as well as their tax information workshops. Bechtel processes visa forms and has the most up-to-date visa information, so be sure you become familiar with their services.

## **Office of Accessible Education (OAE)**

Students with documented disabilities: Students who may need an academic accommodation based on the impact of a disability must initiate the request with the Student Disability Resource Center (SDRC) located within the Office of Accessible Education (OAE). SDRC staff will evaluate the request with required documentation, recommend reasonable accommodations, and prepare an *Accommodation Letter* for faculty dated in the current quarter in which the request is being made. Students should contact the SDRC as soon as possible since timely notice is needed to coordinate accommodations. <https://oae.stanford.edu/>

# Academic Information

## EXPECTATIONS

### **The Honor Code**

Stanford has the distinction of maintaining its academic operations based on the Honor Code. It is expected that all aspects of student conduct will be in accordance with the **Fundamental Standard and the Honor Code** described in the *Stanford University Bulletin* (and reprinted on a following page). By registering at Stanford, students indicate that they accept the provisions of the Honor Code. In particular, it is expected that students will be scrupulously careful neither to give nor to receive aid in any examination or homework.

<https://communitystandards.stanford.edu/student-conduct-process/honor-code-and-fundamental-standard#fundamental-standard>

### **Quality of Research**

Completing the research requirement requires focus and steady effort throughout your degree program at all degree levels. It is important to begin as soon as possible and to see your adviser frequently. You should work with your adviser to keep her/him informed of your progress.

A written assessment of your research must be submitted in the form of a report for MS students, a thesis for Engineer's Degree students, or dissertation for Ph.D. students. This prepared written document is to be the result of independent research and should make a significant contribution to the field.

Preparing this document ALWAYS takes longer than most people expect. Final corrections, illustrations and editing always take more time than students anticipate - do not leave it for the last few weeks! A draft should be submitted early to your adviser so that she/he may review it, offer guidance, and suggest improvements as you go along so you can meet the deadline. The department does not look favorably on students expecting to be supported beyond the normal time it takes to obtain a degree. While a Ph.D. varies considerably in the time it takes to complete a degree, we do expect MS students to complete both course work and research within two years.

The documents must be submitted by the deadline in order to obtain your degree. This is a firm University deadline and there are no exceptions. Please see the degree descriptions and the Academic Calendar for deadlines.

### **Assistantship Responsibilities**

If you have accepted financial support from the Department, there are certain obligations associated with the award. Most assistantships are supported by government grants or industrial affiliates programs. During the first week of the academic year, you should meet with the Principal Investigator (PI) for your source of support. In most cases, the PI is also your adviser. You will be assigned a task and progress on the assignment will be noted. Continued financial support is contingent upon satisfactory progress on your assignments, coursework, and research. We expect graduate students to carefully balance both coursework and research – coming to class alert, on-time, and prepared, as well as working on a continuing basis on your research

project. We do gear research assignments to your background, experience and ability. The goals are achievable.

### **Monday ERE Seminar Attendance (Energy 351/352)**

Every Monday the graduate student seminar is held at 12:30 p.m. All graduate students are expected to attend this seminar. Seminars are a good source of ideas and inspiration for your research. Students who skip seminars are considered to be failing to meet their obligation to devote time and effort to their research. Speakers are invited from outside or from the department to present a variety of topics of interest to professionals in Energy Resources Engineering.

Each research group also has a weekly meeting to discuss research projects related to their specialty. Students are also expected to attend these meetings on a regular basis.

### **Teaching Assistantship**

All students supported by the Department will be called upon to serve as TAs when required. This is because part of the pool of funds used to support students is given to us by the university for TA support. We generally do not ask this of first year students, but you may be asked to serve in this capacity three times if you progress from MS to PhD study. Serving as a TA is also a degree requirement for all students in the Ph.D. program whether or not they are supported financially by the Department.

Students are welcome to express a preference for a particular class they'd like to TA. The way to do this is to discuss with the professor. Students who do not express any preference will be assigned TA duties in a class in which they appear to have done well as a student.

# The Honor Code

In the spring of 1921, after a seven-year campaign by the student body, the first campus-wide honor system was formally adopted by the University. The Code underwent various changes through the years, most recently in the spring of 1977. Modifications to these and other codes of student conduct are drafted and enacted by the Student Conduct Legislative Council in accordance with the procedures set forth in 'The Legislative and Judicial Charter of 1968.

The standard of academic conduct for Stanford students is as follows:

- A. The Honor Code is an undertaking of the students, individually and collectively:**
- (1) that they will not give or receive aid in examinations; that they will not give or receive unpermitted aid in class work, in the preparation of reports, or in any other work that is to be used by the instructor as the basis of grading;**
  - (2) that they will do their share and take an active part in seeing to it that others as well as themselves uphold the spirit and letter of the Honor Code.**
- B. The faculty on its part manifests its confidence in the honor of its students by refraining from proctoring examinations and from taking unusual and unreasonable precautions to prevent the forms of dishonesty mentioned above. The faculty will also avoid, as far as practicable, academic procedures that create temptations to violate the Honor Code.**
- C. While the faculty alone has the right and obligation to set academic requirements, the students and faculty will work together to establish optimal conditions for honorable academic work.**

Examples of conduct which have been regarded as being in violation of the Honor Code include:

- Copying from another's examination paper or allowing another to copy from one's own paper;
- Copying computer programs (or components) from another user and turning them in as one's own;
- Unpermitted collaboration;
- Plagiarism;
- Revising and resubmitting a quiz or exam for regrading without the instructor's knowledge and consent;
- Giving or receiving unpermitted aid on a take-home examination;
- Representing as one's own work the work of another; and
- Giving or receiving aid on an academic assignment under circumstances in which a reasonable person should have known that such aid was not permitted.

In recent years, most student disciplinary cases have involved Honor Code violations; of those, the most frequent is plagiarism. The ordinary penalty for a first offense is a one-quarter suspension from the University, 40 hours of community service, and a grade of "No Credit" for the class in which the violation occurred. The ordinary penalty for multiple violations (e.g. cheating more than once in the same course) is a three quarter suspension, 40 or more hours of community service, and a grade of "No Credit."

# Academic Information

## Graduate Programs

The University's basic requirements for M.S., Engineer, and Ph.D. degrees are discussed in the "Graduate Degrees" section of the *Bulletin*, which can be accessed online.

<http://exploreddegrees.stanford.edu/schoolofearthsciences/energyresourcesengineering/>

The following are minimum requirements for an Energy Resources Engineering student to remain in good academic standing regarding course work:

1. no more than one incomplete grade at any time
2. a cumulative grade point average (GPA) of 3.0 (PhD 3.25)
3. a grade point average (GPA) of 2.7 each quarter.
4. a minimum of 15 units completed within each two quarter period (excluding Summer Quarter).

Unless otherwise stated by the instructor, incomplete grades in courses within the department are changed to 'NP' (not passed) at the end of the quarter after the one in which the course was given. This one quarter limit is a different constraint from the maximum one-year limit allowed by the University.

Academic performance is reviewed each quarter by a faculty committee. At the beginning of the next quarter, any student not in good academic standing receives a letter from the committee or department chair stating criteria that must be met for the student to return to good academic standing. If the situation is not corrected by the end of the quarter, possible consequences include termination of financial support, termination of departmental privileges, and termination from the University.

Students funded by research grants or fellowships from the department are expected to spend at least half of their time (a minimum of 20 hours per week) on research. Continued funding is contingent upon satisfactory research effort and progress as determined by the student's adviser. After Autumn Quarter of the first year, students receive a letter from the department chair concerning their research performance. If problems are identified and they persist through the second quarter, a warning letter is sent. Problems persisting into a third quarter may lead to loss of departmental support including tuition and stipend. Similar procedures are applied in subsequent years.

A balanced master's degree program including engineering course work and research requires a minimum of one maximum-tuition academic year beyond the baccalaureate to meet the University residency requirements. Most full-time students spend at least one additional summer to complete the research requirement. An alternative master's degree program based only on course work is available, also requiring at least one full tuition academic year to meet University residency requirements.

M.S. students who anticipate continuing in the Ph.D. program should follow the research option.

M.S. students receiving financial aid normally require two academic years to complete the degree. Such students must take the research option and are limited to a 10 unit course load per quarter.

The degree of Engineer requires a comprehensive maximum-tuition, two-year program of graduate study. This degree permits more extensive course work than the master's degree, with an emphasis on professional practice. All Engineer degree students receiving financial aid are limited to a 10 unit course load per quarter and need at least ten quarters of work to complete the degree.

The Ph.D. degree is awarded primarily on the basis of completion of significant, original research. Extensive course work and a minimum of 90 units of graduate work beyond the master's degree are required. Doctoral candidates planning theoretical work are encouraged to gain experimental research experience in the M.S. program. Ph.D. students receiving financial assistance are limited to 10 units per quarter and often require more than three years to complete the Ph.D.

# MASTER'S DEGREE PROGRAM

## **IMPORTANT QUARTER TASKS FOR MS STUDENTS (TWO YEARS)**

### **First Quarter (Autumn)**

Submit an MS Program Proposal by the end of your first quarter listing all the courses you plan to take. You must meet with your adviser and make decisions about the areas you wish to pursue in the Department prior to completing the form. It will have to be reviewed and signed by the Chair also. All subsequent changes must be discussed with your adviser, approved by the Chair and submitted in writing to Student Services PRIOR to making the change in your course registration.

### **Third Quarter (Spring)**

Early this quarter, students should have made a decision to take a summer job or remain at Stanford to continue their research. This decision should be made in consultation with your adviser. Your adviser must sign the summer RA request form agreeing to provide financial support for you if you remain at Stanford during the summer. All summer support comes from research project funds. If working, you need to decide whether to pay for 3 units of tuition and register for a curricular training course (ENERGY 255), or use 3 months of your “optional practical training” if you are an international student. These units DO NOT count toward the 45 units required for the MS degree. Obtain information from Bechtel in order to make your visa application on time.

[http://icenter.stanford.edu/students/current/opt\\_prac\\_train.html](http://icenter.stanford.edu/students/current/opt_prac_train.html)

### **Fourth Quarter (2nd Autumn)**

Recheck your progress toward your MS Program Requirements. If there are courses you planned to take which need to be changed, discuss the changes early with your adviser and submit the necessary revisions to Student Services. If you plan to apply to the Ph.D. program, make sure your adviser agrees to support you in your application to the Admissions Committee. Try to have sufficient progress made in your research project by this time so that you can foresee a written report emerging. If you are applying to the Ph.D. program, submit your admissions application to Student Services by the admissions application deadline posted for that year. Work on writing your research report.

### **Fifth Quarter (2nd Winter)**

Setup a meeting with Student Services to check your program progress to make certain you have done all the things you need to do to graduate. (This allows you a little time to take another course in Spring if you need to do so.)

If you are not going on for a Ph.D., please see Student Services to determine what you will take in your last quarter, and how many units you should register for. If you only have your MS Report to complete and no additional courses to take, you can register TGR or Grad quarter, and you will need to submit a petition form to register under TGR or Grad status. (Please see Student Services for petition process). If you are receiving financial support, your adviser will expect you to register TGR as soon as possible, to reduce the tuition that needs to be paid – be sure to discuss this with your adviser.

### **Sixth Quarter (2nd Spring)**

Submit a draft of your research report to your adviser early in the quarter so there is sufficient time for changes, editing, adjusting illustrations, and those final editing details that always take so long to do. Apply to graduate in AXESS by the deadline - otherwise you will not obtain a degree. Handle any visa issues which may pertain to you depending on whether you will be leaving the country, going to work, or continuing on for a Ph.D. Be sure to talk with the staff at the Bechtel International Center early.

Please refer to the University Bulletin and ERE website for specific course requirements.

## **M.S. Checklist**

1. Submit Program Proposal Form by November 2018.
2. Submit Summer RA request form by May 2019.
3. Submit Revisions to Program Proposal by November 2019.
4. Submit PhD application (if you plan to apply for PhD) by the posted deadline in your second year.
5. Submit draft of your MS thesis early Spring quarter in your second year.
6. Apply to graduate on Axess for Spring quarter conferral early Spring in your second year.

\* Students should apply for TGR or Grad quarter status as soon as you've fulfilled all of your course and unit requirements. Please see Student Services for details.

# DOCTORAL DEGREE PROGRAM

## **A Typical Ph.D. Program**

The Ph.D. program is normally a three to four year program after completion of the master's degree. Because the actual 36 units of course work can be obtained in 4 quarters, the speed with which the degree can be completed is largely dependent on your research and writing progress. During the first and second years, a minimum of 36 units of credit are to be acquired in courses approved by your adviser and the Department. You must TA at least one class to meet the teaching requirement for the Ph.D. degree, though you may be called to TA multiple times if necessary. You should register for ENERGY 359 to receive credit for the teaching experience, but those units will not count toward the 36 units of course work. In addition, a minimum of 36 units of research credit (ENERGY 363) are needed as you select a problem, make a literature survey, formalize your research objectives and begin your research. Basic requirements include a minimum of 135 units of satisfactorily completed graduate study. Students must take at least 90 units beyond the 45 units required for the master's degree. The 90 units are composed of a minimum of 36 units of research and a minimum of 36 units of course work. The final portion of the program is full-time work on completing the research and writing the dissertation.

## **Course Work**

See a current issue of the Stanford *Bulletin* for a list of possible graduate courses to be included in the 36 unit course work requirement. Other courses may be approved by your adviser. Any changes made to your original program proposal must be approved by your adviser and submitted in writing to Student Services PRIOR to registration for the course, or dropping the course from your study list.

## **Qualifying Exam**

There are two steps to the qualification procedure. Students first take a written exam that is offered at the beginning of Autumn Quarter. The written exam focuses upon synthesis of knowledge acquired from core courses in ERE or PE. Students continuing within the department take the written exam at the beginning of their first quarter as PhD students. Students who completed their MS outside of the department take the exam at the beginning of their fourth quarter as PhD students. A student who does not pass the written exam may not be allowed to take the exam a second time. Any student who does not pass the written exam is considered to have failed the qualifying exam. Any student who is deemed to have not made sufficient research progress may not be allowed to take the preliminary exam and research progress shall be taken into account for pass, fail, and retake decisions.

A written Ph.D. proposal and oral presentation are the main components of the second step of the Qualifying Exam. The written proposals are reviewed by three faculty members. Students are provided a template of what constitutes an acceptable proposal. Students subsequently make an oral presentation of their proposal to three faculty members including material such as a literature review, identification of key unanswered research questions, proposed work outline, and an oral presentation. Following the presentation, the student is questioned on the research topic and general field of study. The student can pass, pass with qualifications requiring more classes or teaching assistantships, or fail. Students who completed their MS in the department prepare and defend their proposal in their third quarter (not counting summer) as a PhD student. Their advisor may request an additional quarter given extenuating circumstances such as a major change in research focus between MS and PhD programs. Students who completed their MS

outside of the department complete the proposal in their fourth quarter (not counting summer) of study.

### **Candidacy**

A student becomes an official candidate for the Ph.D. degree only after passing the qualifying exam and submitting an "Application for Candidacy for Doctoral Degree," which has been approved by your adviser and Department. Candidacy remains valid for 5 years. It may be renewed only by submission and approval of a petition for extension approved by the adviser and Department Chair. Extensions are not automatically granted.

### **Research Requirements**

A minimum of 36 units of research beyond the master's degree are required. It is not uncommon for students to undertake a research topic that is different from the master's research. It is not unusual to change advisers between the MS and Ph.D. degrees in order to gain breadth of experience. Students are discouraged from changing advisers or topics during the course of their actual degree research because it delays the completion of the degree and may interrupt funded research programs. Ph.D. research is often difficult, and the degree is awarded to those with the ability and commitment to overcome the difficulties. It is expected you will work closely with your adviser to keep him/her informed of your research progress.

### **Research Dissertation**

The University requires all candidates for the Ph.D. degree to submit an acceptable dissertation that must be "a contribution to knowledge and the result of independent work, expressed in satisfactory form". Early in the student's program of research leading to the presentation of the dissertation, a Doctoral Dissertation Reading Committee should be selected and the appropriate form submitted to Student Services.

### **University Oral Examination - Dissertation Defense**

In order to obtain a Ph.D. degree, a candidate must pass a University Oral Examination in defense of the dissertation. The purpose of the exam is to test candidate's command of the field of study.

The Dissertation Defense Committee consists of at least five Stanford faculty members, four examiners and the objective committee chair from another department. The chair may not have a full or joint appointment in the adviser's or student's department. However, a courtesy appointment does not affect eligibility. The chair can be from the same department as any other member, and can be from the student's minor department. All members must be on the Academic Council.

The University Oral Examination Schedule Form must be submitted three weeks prior to the proposed examination date. The draft thesis must be provided to the reading committee members at least three weeks prior to the oral examination. The student will have 45 minutes to present the dissertation, followed by a period of private questioning by the Committee, not to exceed 3 hours. The candidate passes the examination if the Committee casts four out of five, five out of seven, etc. favorable votes.

### **Dissertation Submission**

Deadlines for submitting signed copies of the dissertation are given in the Academic Calendar. These are firm University deadlines. Make an appointment with Student Services Center for

updated information. Guidelines for dissertation submission can be found on the student affairs website.

Please refer to the University bulletin or ERE website for specific course requirements.

## PhD Checklist

1. Discuss coursework and research projects with adviser first autumn quarter.
2. Discuss qualifying exam requirements with adviser and committee members in the first year of program.
3. (a) Incoming PhD students: Complete qualifying exam by 4<sup>th</sup> quarter Submit the qualifying exam form to Students Services Manager to record official results.
4. Complete the “Application to Candidacy” form and submit to Student Services the same quarter you pass your qualifying exam.
5. If you plan to transfer units from your MS degree, please complete a transfer request form. You may transfer up to 45 units from your MS degree. Please see Student Services for details.
6. Once you complete all your course and unit requirements (135 units beyond BS), you should apply for TGR (Terminal Graduate Rate) status. Please see Student Services for details.
7. The Dissertation Defense usually occurs in the 4<sup>th</sup> year of your PhD program. Please look out for guidelines sent by Student Services.
8. Dissertation Submission usually occurs in the same quarter that you defend. If you need more time for revisions, you may petition for grad quarter AFTER you defend and submit your dissertation the following quarter. Please see Student Services for details.

# GRADUATION

## **Degree Conferral**

In order to have your degree conferred, you must have completed all of the University and Department requirements, and submitted all work before the deadlines. There are no exceptions! The University imposes requirements such as submission of official scores and transcripts, along with English class requirements that the Department has no control over. Please pay attention to the messages, letters, and notes you receive and respond to them in a timely manner.

## **Notice of Intention to Graduate**

You must file an application to Graduate through AXESS for the quarter you will have completed the degree requirements. If you do not finish in time, you will need to annul the initial Intention to Graduate and submit a new one for the quarter you intend finish. Please refer to the University calendar for deadlines. You will not be able to graduate unless you apply to graduate online. There are no exceptions. This is a University requirement. The deadline is listed in AXESS.

## **Commencement**

If you will graduate in June, you have the option of attending Commencement. Please notify the department if you plan to participate in commencement. If you completed your degree in a previous quarter that academic year, you may also let the department know if you wish to participate in commencement. If you intend to finish your degree in summer quarter, permission may be granted for you to "walk-through" Commencement. A petition needs to be approved by Student Services.

## **Diploma**

Actual diplomas are distributed at the School graduation ceremony IF you have told the University and department by the deadline that you will be graduating, and IF you have stated that you will be attending the ceremony AND that you want to receive your diploma there. Diplomas are only ordered once per year, so if you do not state your choice in AXESS by the deadline, you will not receive your actual diploma until the following year. Letters of completion can be written for students who need proof of graduation.

## **Before You Leave**

Before you leave the Department you **MUST** do the following: leave a new address, phone number and email address by filling out an Alumni Information Form; return your keys; provide computer files to your adviser with essential information; clean out your computer and your computer accounts; report the status of experimental apparatus; clear out and clean up your office.

# Financial Information

## GETTING PAID ON TIME

### **Submit Your Study List in Axess**

Submit your study list in Axess. There are strict consequences for not filing by the deadlines. You will find the deadlines on the Web and in the academic calendar.

### **Employment Forms**

Be sure you have filled out ALL forms properly. Stanford's online forms may include: Employment Eligibility Verification Form I-9, Patent Agreement SU-18, SU-32 Tax form, and other tax forms if you are from a country that has a tax treaty with the U.S. Payroll will e-mail if you are eligible for tax treaty information. **Also make sure copies of your I-9 documents (passport, visa, I-94, and I-20), driver's license, and your social security card have been submitted to Student Services to finish filling out and then to send to payroll. Keep copies for your own files.**

The I-9 form establishes eligibility to work in the U.S. for a maximum of two years for an MS degree and three years if you are directly entering the Ph.D. program. This form may need to be renewed periodically during your stay at Stanford. Students should be aware of any expiration date that may be listed and contact the Bechtel International Center and the Student Services Manager well before that date so that the I-9 can be extended.

### **Paychecks**

Students are strongly encouraged to sign-up for direct deposit of their stipend and salary online via AXESS.

### **Research/Teaching Assistantship**

If you are receiving financial support from the department, you will be supported as a Research and/or Teaching Assistant. If you are an RA or TA, you will receive paychecks on the 7th and the 22nd of the month, beginning on October 22. You will need sufficient funds to get by until you are paid. Student assistantship salary is taxable income, and applicable taxes and deductions will be withheld in accordance with the W-4 Tax Data form completed by each student on AXESS. Assistantships are for the entire academic year (Autumn, Winter and Spring). Summer Assistantships are not guaranteed. Students must petition for summer funding every spring quarter. You must maintain sufficient effort and progress in your research to obtain continued funding (see Research & Teaching Assistantships). Academic pay periods are as follows:

Autumn Quarter 10/1-12/31

Winter Quarter 1/1-3/31

Spring Quarter 4/1-6/30

Summer Quarter 7/1-9/30

If you do not receive a check or pay stub on payday, see Student Services.

If you received less money than you anticipated, look at AXESS for your account and/or check with the Student Services Center for information on withholdings.

### **SGF Stipend**

If you were awarded a Stanford Graduate fellowship, stipends are available the first day of each quarter when students enroll in the minimum required units by the published deadline. During the regular academic year, eight units is the enrollment minimum (but normally students should enroll for ten units). During the summer quarter, the minimum is three units. Stanford Graduate Fellows (SGFs) are expected to use their SGF funds within five years. Please refer to the SGF website for further details and guidelines.

### **Funding System**

All graduate level funding is administered and processed through the Graduate Financial System (GFS). MS students are paid the same rate as PhD students who have not yet advanced to candidacy. PhD students who have passed their qualifying exam and advanced to candidacy will be paid a slightly higher rate.

### **Tuition**

The tuition portion of fellowships and/or assistantships appears as a credit on the student's quarterly online bill in AXESS. Bills prior to the start of the quarter will reflect a tuition charge at the 8-10 unit rate.

### **Campus Health Service Fee**

Beginning in the fall of 2009, Stanford University implemented a Campus Health Service Fee per quarter. The fee covers many services provided by Vaden Health Center, including primary care medical visits, psychological evaluation and short-term therapy at Counseling and Psychological Services (CAPS), and access to health and wellness programs.

The mandatory fee applies to all undergraduate and graduate students enrolled on the Stanford campus, including visiting researchers and students participating in high school summer programs that result in course credit at Stanford.

### **Cardinal Care and Health Insurance Subsidy**

Cardinal Care is an annual enrollment insurance plan. The annual plan includes coverage in summer quarter (whether the student is enrolled that quarter or not). The annual cost of this coverage will be charged over three quarters of the academic year, i.e., in Autumn, Winter and Spring quarters.

Health Net of California, will provide the medical benefits and Value Options will administer the mental health benefits.

Enrollment in Cardinal Care is a once-a-year event. In their first registered quarter of each academic year, students will decide whether or not to waive Cardinal Care coverage for that year. International students will be required to enroll in Cardinal Care, but may request an exception if they have an insurance plan with benefits that meet or exceed minimum standards set by the university.

Benefits will remain comprehensive, with the same access to Stanford University Medical Center.

### **Managing Student Online Bills (Statements)**

All graduate students have an online bill or statement viewable in AXESS. Those who are employed as research or teaching assistants also have an online pay statement, which is separate from the online bill.

### **Bills/Invoices in AXESS**

Students can log in to AXESS to view their billing history and balance due. The online bill contains information about financial aid (e.g., stipends and loans), expenses (e.g., housing and dining), and payments (e.g., credit card or check payments by the student). The tuition allowance from assistantships, stipends from fellowships, the health subsidy, and student loans will appear as “Anticipated Aid” in the online statement at the start of each quarter. Once those funds are disbursed, they move from the Anticipated Aid to the Payments section. Salary from assistantships does not appear as Anticipated Aid. Students are encouraged to sign up for direct deposit online via AXESS to expedite receipt of refunds and stipend payments.

Students can pay their bills online via the ePay feature in AXESS. More information is available in AXESS or at <http://co.stanford.edu/students/stanfordepay/>.

### **Online Pay Statements**

Salary from assistantships is paid bi-monthly approximately on the 7<sup>th</sup> and 22<sup>nd</sup> of each month. This money appears in the online pay statement (i.e., not the online bill/invoice) in AXESS only after the pay has been disbursed. Students can verify that an assistantship is in the system by looking for their tuition allowance in the Anticipated Aid section of their online bill. Assistantships will not appear in the online pay statement prior to the first pay date. Students are encouraged to sign up for direct deposit online via AXESS.

The ability to view the online pay statement is disabled when students are no longer employed by the University (e.g., during quarters in which they are not working as research or teaching assistants). Therefore, it is recommended that students print their online statements if they anticipate needing a hardcopy at a future date. Otherwise, hardcopies can be ordered directly from the University Payroll Office for a charge.

### **Payroll Deductions**

Students can apply for payroll deductions online via AXESS to cover housing, dining services, and other costs. These expenses can be deducted directly from their net pay from assistantship or other salaries. Student Financial Services, in conjunction with the Stanford Payroll Office, administer this program. Questions or issues should be submitted online via the HELP SU system. The “Student Accounts” or “Payroll” category should be used when filing the help ticket. Or, Student Financial Services can be reached at the Student Services Center.

# Financial Information

## RESEARCH & TEACHING ASSISTANTSHIPS

Students may be supported by grant or contract funds, by funding from one of the Industrial Affiliates programs (SUPRI-A, SUPRI-B, SUPRI-D, SCCS, Smart Fields, Geothermal, and SCRF), by a teaching assistantship, or by a SE3 fellowship or a departmental fellowship. Each funding source requires that adequate academic and research progress be made if the funding is to continue.

### **Research Assistantships**

This is to help you understand your responsibilities as Research Assistants. Some support may be in the form of a contract, the terms of which must be met by each Principal Investigator (your adviser). In turn, each student supported by these funds also has obligations. A Research Assistant must select a research project in those program areas covered by the contract, prepare quarterly and annual reports, attend weekly meetings, make research presentations, and assist in other program or departmental matters as appropriate.

Appointments are for half-time work with ten units of tuition. “Half time” means a minimum of 20 hours a week on the average should be spent on project activity and the rest of the time should be devoted to course work. Students must understand the importance of spending productive time on research. Without reported progress and results, our sources of student support could disappear. The research performed as a Research Assistant is also part of the research requirement for any of the advanced degrees.

When students first arrive, they are given initial, often short-term, research assignments. Generally, assignments to a particular research group are based on the information given in the Statement of Purpose you submitted with your application form. This initial assignment serves as a means of getting you started on research and acclimated to the Department. If you find that this research assignment is not right for you, please see the Student Services Manager, the department chairman or your adviser to discuss the possibility of changing research groups.

Our policy is to try to match Research Assistants' interests with research programs. The research usually fulfills graduate research requirements for degrees although this is not always the case. Some students finish one or more projects before finally determining their thesis or dissertation topic. If you have questions regarding your situation, please contact the Principal Investigator (your adviser) of your area of support, get some ideas for your research, and get started. We need to keep funds flowing to us from government agencies and private companies. We can only do this by demonstrating our ability to conduct innovative research in a timely manner.

### **Teaching Assistantships**

All students supported by the Department will be called upon to serve as TAs when required. Serving as a TA is also a requirement for all students for the MS and Ph.D. degree whether or not they are supported by the Department, in order to meet the teaching requirement of the degree. PhD students may be called upon to TA multiple times during their time at Stanford.

## **Duration of Aid**

Financial aid is awarded on a quarter-by-quarter basis. Continuation of funding in a subsequent year is based on academic and research performance (primarily research). A decision on the continuation of aid is made at the same time as incoming student admissions.

We expect that MS students will complete a degree in two years - 5 to 7 quarters. We expect that Ph.D. students can complete a degree in 3 to 4 years beyond the MS - 9 to 16 quarters. In unusual circumstances, students may have particular difficulty with a research project and may need additional time to complete the degree. In any event, financial aid will not be continued beyond a certain maximum number of quarters. For MS students, maximum support is 8 quarters of ten units each quarter; for Eng. degree students, maximum support is 13 quarters of ten units each quarter; and for Ph.D. students, maximum support is 18 quarters of ten units each quarter.

## **AWAY FROM CAMPUS**

If you will be away from campus you must inform your adviser before you leave and file a leave of absence form with Student Services if you will be out for the quarter. You must be enrolled or have an approved leave of absence status for the duration for your program. You will be automatically discontinued from the Stanford system if you fail to enroll or do not have an approved leave status.

## **Vacations and Sick Leave**

Student financial support is based upon research progress and the timely continuation of our funded research projects. It is our expectation that students are physically present on campus (i) anytime that class is in session including the starting and ending days of each quarter and (ii) that the time students are away from campus is generally limited, as described below.

It is important to distinguish the difference between holidays and times that the University is in recess (i.e., no courses or exams are held). For instance, Spring Break is a week-long recess and not a week-long holiday. Breaks are the best time to accomplish uninterrupted research. Accordingly, students are expected to continue their research during breaks. During the summer, students have options of working in industry, taking the summer off without pay, or working on research in the department.

Students may be away from campus during any of the breaks between academic year quarters for a period not to exceed a cumulative of 3 weeks per year (including Winter Closure). Students must discuss plans to be away from campus with advisors well in advance of any planned absence similar to any work environment. It is important that student absences are coordinated with others in research groups and that critical tasks are covered. The department will not fund students for months when they are away from campus because this is against the rules of (government and industry) contracts and grants.

Please refer to the university guideline on sick leave. <https://adminguide.stanford.edu/chapter-10/subchapter-2/policy-10-2-1>

## **Summer Support**

Financial aid is usually for three quarters only (Fall, Winter, Spring). Depending on the project, support may also be available for Summer quarter, but you must apply to your adviser or funding

source during Spring quarter. The signed application form must be submitted to the Student Services Manager.

### **Units Allowed and Required**

Supported students must register for and carry a 10 unit load. They cannot take either more or less than the 10 units per quarter, except toward the end of the degree program when they should register TGR. The number of units taken is directly related to the tuition support funded by the Department. It is also related to visa requirements and the provisions of grant and contract funding.

International students not financially supported by the Department must also register for at least 8-9-10 units in order to meet INS visa requirements. Ph.D. students may begin to register TGR with greatly reduced tuition as soon as they have completed their course work with no incompletes, met the residency requirements as listed in the Bulletin, established a reading committee, and completed any qualifying examinations required by the School or Department. MS students with outside funding doing a coursework only MS degree may finish in less than two years by taking full tuition loads each quarter. The Department requires special permission from your adviser to take more than 15 units in a quarter.

### **Additional Financial Support**

The School of Earth, Energy & Environmental Sciences encourages graduate students to seek out external fellowships and awards whenever and wherever possible. Evidence of securing these prestigious awards is highly valuable beyond any financial benefit, as they demonstrate the excellence of a student's work and can help later in the student's career.

Extramural awards will be applied to meet the annual graduate student support needs as set by the school. When the award is lower than the school rate, departments and programs are required to provide supplementation to bring the student's funding up to the relevant rate. When the award is greater than the school rate, the student simply receives the full award. In the case of a prize or award for academic excellence from an external group, the student may accept it and use the funds in accordance with the requirements of the donor.

No additional funding is to be provided to graduate students outside of the standard 50% rate with the exception of funds for specific conference travel or research. Hourly work in addition to assistantship appointments is only allowable in accordance with university guidelines.

### **McGee Grant**

The SE3 has a research fund available named the McGee fund. Students may apply for funding for various research projects from this fund. It is especially useful for students doing experimental work that has material costs involved. Application requires a proposal describing the research and a budget for materials.

### **Working Elsewhere - US Citizens**

The University has a strict policy about working while being a registered student. Regardless of whether you are supported by the Department or have your own support, students who are US citizens are not allowed to work outside the campus for more than eight hours a week.

**International students may not work off campus at all.** If you are thinking about working outside the Department, you must first have permission from your adviser.

## **Working Elsewhere - International Students**

Foreign students supported by the Department are not allowed to work more than the 20 hours per week expected for their Stanford research projects. Students being supported by their employer or government are expected to be devoting all of their time to their studies. International students cannot work at all in the US, except under particular circumstances in the summer. They will be expected to participate in research projects as part of their degree requirements.

Rules regarding work by international students and visitors are established by the US government, are part of your visa agreement, and are not generally under the control of the Department.

If you have any questions, check with Stanford's International Center concerning work related activities.

## **Student Travel**

Students traveling to official events (e.g. SPE conferences) on behalf of the Department (i.e. presenting a paper), and with PRIOR approval from their adviser may be reimbursed for the normal travel expenses that have been approved. Students are expected to share hotel rooms in order to reduce expenses, and we will not reimburse students for single rooms. Payments will only be made for meals actually paid for by the student. **ALL ORIGINAL RECEIPTS MUST BE KEPT!** The funds for the reimbursement come from the research group the paper was written for, (i.e. if a student in the SUPRI-B research group writes a paper that is accepted for the SPE, then the SUPRI-B research group would be paying for the travel expenses of that student).

The Department has travel funds to offset the cost to the research groups. Students can and should apply for funds toward travel expenses. The Department funds are only available for students presenting papers. Applications and further information can be obtained from the Research Group Administrators.

Reimbursement rules are complex and strict. Documentation is required. These are US government rules established by the Internal Revenue Service, and we have no control over them. If you give a paper, please come back with a program with your name on it showing that you were scheduled to present the paper.

You must see the administrator of your research group first to coordinate travel arrangements. They are able to use the Stanford Travel Card to pay for your airfare and conference registration and as a guarantee for your hotel reservations, if these expenses are approved by your adviser. This will reduce your out-of-pocket expenses.

It is not expected that students will be renting cars. However, there may be occasions when it is necessary. Before renting a car, check with your adviser and get permission. If a car is rented, the rental car insurance must be declined if you are in the U.S.A. Any accidents will be covered by Stanford's own insurance. If you do accept the insurance, you will not be reimbursed for the cost of the insurance (Travel Office rule for faculty and staff also.) We have a card you can carry to confirm this to the rental agent. If you are renting a car overseas, accept the insurance. Students driving vehicles on Stanford travel are expected to obey all rules of the road - Stanford will not reimburse any fines for traffic violations.

**Note \*** Students traveling with permission from their adviser but not in an official capacity (i.e. not presenting a paper), may petition PRIOR to travel to have their travel reimbursed. The reimbursement would be paid by the appropriate research group, and again, ALL ORIGINAL RECEIPTS MUST BE KEPT. You must have a letter written by your adviser explaining that the trip is an integral part of your academic program in order to be reimbursed if you are not giving a paper.

If you traveled without prior approval, you will not be eligible for reimbursement. Any trips which combine personal and business travel will only have the business portion of the travel reimbursed. Also, if you take a spouse along, expenses for the spouse will not be reimbursed.

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# USEFUL STANFORD WEB SITES

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## Web Sites

**Gateway for Students** <https://vpge.stanford.edu/gradgateway>

Office or Department	Purpose	Web Link
<b>Academic Calendar</b>	Lists all University enrollment, degree progress, and financial deadlines.	<a href="http://exploreddegrees.stanford.edu/academiccalendar/">http://exploreddegrees.stanford.edu/academiccalendar/</a>
<b>AXESS</b>	Web based student portal for: all enrollment and financial transactions and information; health insurance waivers; enrollment verifications; transcript requests; and student contact information updates.	<a href="http://axess.stanford.edu">http://axess.stanford.edu</a>
<b>AXESS Help</b>	Provides an overview, instructions, and screen-shots for using AXESS, including enrollment help.	<a href="https://registrar.stanford.edu/resources-and-help/axess-students">https://registrar.stanford.edu/resources-and-help/axess-students</a>
<b>Bechtel International Center</b>	Foreign student services including: visa advice and processing for students and their families; courses and events geared toward foreign student issues; other resources related to foreign student life on campus.	<a href="https://bechtel.stanford.edu/">https://bechtel.stanford.edu/</a>
<b>Career Development Center (BEAM)</b>	Resources related to career and professional development, including employment search services.	<a href="https://beam.stanford.edu/">https://beam.stanford.edu/</a>
<b>Computing and Communication</b>	Provides links to Stanford's information technology (IT) resources.	<a href="http://itservices.stanford.edu/">http://itservices.stanford.edu/</a>
<b>Counseling and Psychological Services</b>	Counseling and Psychological Services offers evaluation and brief counseling, including personal, couples and group therapy. Any registered Stanford student is eligible.	<a href="https://vaden.stanford.edu/caps-and-wellness/counseling-and-psychological-services-caps">https://vaden.stanford.edu/caps-and-wellness/counseling-and-psychological-services-caps</a>
<b>Dean of Students</b>	General resource and advocate for students. Supports and oversees student-based organizations on campus, including student government.	<a href="http://studentaffairs.stanford.edu/index.php">http://studentaffairs.stanford.edu/index.php</a>

Office or Department	Purpose	Web Link
<b>Disability Resource Center/Office of Accessible Education</b>	Helps students with disabilities find resources both on campus and in the community at large, and provides the support and services needed to participate in the rich and varied life of Stanford University.	<a href="http://studentaffairs.stanford.edu/oe">http://studentaffairs.stanford.edu/oe</a>
<b>Diversity and Access Office</b>	Ensures University compliance with federal, state, and local regulations concerning diversity and disability.	<a href="https://oe.stanford.edu/">https://oe.stanford.edu/</a>
<b>Emergencies and Crises (Physical and Psychological Health Related)</b>	Both Medical Services and Counseling and Psychological Services at Vaden Health Center are available to help in urgent situations 24 hours a day, including when Vaden is closed. For life-threatening emergencies, you should first call 911 (or 9-911 from a campus phone), or go to the nearest hospital emergency room.	<a href="https://vaden.stanford.edu/get-help-now">https://vaden.stanford.edu/get-help-now</a>
<b>English for Foreign Students/Language Center</b>	Classes and support for those learning English. Also evaluates English skills for TA positions.	<a href="https://language.stanford.edu/programs/efs/languages/english-foreign-students">https://language.stanford.edu/programs/efs/languages/english-foreign-students</a>
<b>Faculty-Advisor Relationship</b>	Good practices in the student-adviser relationship.	<a href="https://vpge.stanford.edu/academic-guidance/advising-mentoring">https://vpge.stanford.edu/academic-guidance/advising-mentoring</a>
<b>Graduate Life Office</b>	Serves the needs of graduate students and student families who live on and off campus. Provides a comprehensive resource for information and advice regarding all aspects of graduate student life. Administers the residential program, helps students manage personal difficulties, works closely with graduate student organizations, participates in campus-wide initiatives that address graduate student needs and concerns, and sponsors University-wide welcomes.	<a href="https://glo.stanford.edu/">https://glo.stanford.edu/</a>
<b>Graduate Student Council</b>	Student council representing the interests of graduate students.	<a href="http://gsc.stanford.edu/">http://gsc.stanford.edu/</a>

Office or Department	Purpose	Web Link
<b>Graduate Student Forms</b>	The Office of the University Registrar publishes forms to be used for various campus-wide matters (e.g., application for candidacy; reading committee formation, oral exams, etc.).	<a href="https://registrar.stanford.edu/resources-and-help/student-forms/graduate-student-forms">https://registrar.stanford.edu/resources-and-help/student-forms/graduate-student-forms</a>
<b>Housing and Dining Services</b>	Provides information about housing and dining services on campus.	<a href="https://rde.stanford.edu/">https://rde.stanford.edu/</a>
<b>Office of Community Standards</b>	Administers the student judicial process for Stanford and works toward an honest and responsible community. Holds students accountable for adhering to established community standards including Stanford's Fundamental Standard and the Honor Code.	<a href="https://communitystandards.stanford.edu/">https://communitystandards.stanford.edu/</a>
<b>Libraries</b>	Links to information about Stanford Libraries and academic information resources.	<a href="http://library.stanford.edu/">http://library.stanford.edu/</a>
<b>Ombuds Office</b>	An impartial dispute resolver who strives to see that faculty, staff and students at the university are treated fairly and equitably. Any Stanford faculty, student or staff can seek the advice of the Ombuds Office.	<a href="http://www.stanford.edu/dept/ombuds/">http://www.stanford.edu/dept/ombuds/</a>
<b>Police - Stanford University Department of Public Safety (non-emergency)</b>	Non-emergency information: LiveScan fingerprinting; crime prevention and statistics; crime alerts; and bicycle registration.	<a href="http://www.stanford.edu/group/SU-DPS/">http://www.stanford.edu/group/SU-DPS/</a>
<b>Research Policy Handbook</b>	Best practices for academic authorship and other research matters.	<a href="http://rph.stanford.edu/">http://rph.stanford.edu/</a>
<b>Title IX Office</b>	Stanford University is committed to providing an environment free of discrimination.	<a href="https://titleix.stanford.edu/">https://titleix.stanford.edu/</a>
<b>Sexual Harassment Policy Office</b>	Provides advice, information, support, prevention services in matters of sexual harassment.	<a href="http://harass.stanford.edu/">http://harass.stanford.edu/</a>
<b>Stanford Bulletin</b>	Current and past Stanford Bulletins are archived online by the Office of the University Registrar.	<a href="http://exploreddegrees.stanford.edu">http://exploreddegrees.stanford.edu</a>

Office or Department	Purpose	Web Link
<b>University Registrar's Office</b>	Supports teaching and learning at Stanford by maintaining the integrity of academic policies and the student information system. They are the stewards of Stanford's student records from application to degree conferral in perpetuity. Administer all enrollment transactions via AXESS.	<a href="https://registrar.stanford.edu">https://registrar.stanford.edu</a> /
<b>Vaden Student Health Center</b>	Provides health care, support, and education	<a href="http://vaden.stanford.edu/">http://vaden.stanford.edu/</a>
<b>Vice Provost for Graduate Education</b>	Administers University-wide fellowships; sets RA/TA/CA appointment terms; policy development related to graduate student research and employment.	<a href="http://www.vpge.stanford.edu">http://www.vpge.stanford.edu</a> <a href="http://www.gap.stanford.edu">http://www.gap.stanford.edu</a>