

Civil & Environmental Engineering

Graduate Degrees Handbook

A guide to department requirements, forms and procedures

November 2021

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Welcome to Stanford & CEE!

This publication is intended for current and prospective CEE graduate students to explain the procedures and forms necessary for successful completion of the graduate-level degree requirements. Many of the forms discussed herein can be obtained from the department's website

(<https://insidecee.stanford.edu/cee-student-resources>) or by contacting the Student Services Office located in:

Jerry Yang & Akiko Yamazaki Environment & Energy (Y2E2) Building
473 Via Ortega, Room 316 (Third Floor, Red Atrium)
Stanford, CA 94305

Completing and turning in all forms to the appropriate office in a timely manner is strictly the responsibility of the student and not the faculty advisor or their administrative staff.

In particular for information or questions concerning:

- [Financial aid, stipends, assistantships](#), see Nan Hwa Aoki, CEE Student Services Manager, Y2E2 Building, Room 314 (nanaoki@stanford.edu, 5-2387)
- [Graduate admissions, I-9's](#), see Laura Castañeda, CEE Student Services Specialist Y2E2 Building, Room 314 (lcastaneda@stanford.edu, 4-9475)
- [Degree progress, graduating, courses, or changing programs or advisor](#), see Jill Filice, CEE Student Services Specialist, Y2E2 Building, Room 316 (jill.filice@stanford.edu, 5-2386).

The CEE faculty Co-directors of Graduate Studies (DGS) are Profs. David Freyberg and Christian Linder. They are responsible for overseeing graduate studies in the Department. They also provide an additional faculty resource for graduate students, in addition to their advisors and thesis committee members, with respect to Department policies and procedures.

This Handbook focuses on department-level expectations and procedures. The Stanford Bulletin (<http://exploreddegrees.stanford.edu>) is frequently referenced herein, along with other university-level weblinks, as it is not feasible for this CEE Handbook to cover every single university-level policy or procedure. Thus, students bear the responsibility for referring to and familiarizing themselves with the most up-to-date information on University Policy and Procedures. If you have any questions about the information contained in this CEE Graduate Degrees Handbook, please see your academic advisor or the department's student services administrators listed above for clarification.

Useful Resources

Academic Calendar <https://registrar.stanford.edu/academic-calendar>

Axess Axess is a consolidated online platform used by the Stanford community to access information and record transactions related to: Academic Advising, Teaching and Grading; Employment; Student Enrollment and Financials; Training, and Workflow-Enabled Administrative Processes.

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

Bechtel International Center For international students, this center offers guidance and assistance in maintaining compliance with INS regulations.

<https://bechtel.stanford.edu/coming-stanford>

Graduate Academic Policies & Procedures <http://gap.stanford.edu/>

Graduate Life Office Provides a source of comprehensive, impartial guidance and information related to all aspects of your life as a graduate student.

<http://studentaffairs.stanford.edu/glo>

Graduate Student Forms <http://studentaffairs.stanford.edu/registrar/forms/grad>

Housing On and off-campus information. <http://housing.stanford.edu>

Stanford News & Publications Provides the latest news about Stanford as well as information about upcoming events on campus. <https://ucomm.stanford.edu/publications/>

Stanford Bulletin Stanford University's official catalog of courses (including time scheduling) degrees, policies, and University and degree requirements

<http://exploreddegrees.stanford.edu>. The specific link for the courses with time schedule is here: <http://explorecourses.stanford.edu>

Stanford Directory <http://stanfordwho.stanford.edu/>

Stanford Fundamental Standard The Fundamental Standard is an aspirational statement of Stanford's ideal of civic and moral community.

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

Stanford Honor Code The Honor Code is the University's statement about academic integrity. It governs student conduct in all academic endeavors and guides the relationship between students and faculty.

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

Student Services Center Located on the second floor of Tresidder Memorial Union. They provide a single point of service for answers to questions concerning administrative and financial issues. <https://studentservicescenter.stanford.edu/>

Vice Provost's Office for Graduate Education (VPGE) The VPGE office works collaboratively across the University to ensure that every graduate student has the best possible education. Many resources for all aspects of graduate education can be reached through: <https://vpge.stanford.edu/>

Registration (Filing a Study List)

Graduate students are required to be registered in the autumn, winter and spring quarters of each academic year until conferral of the degree. . Students who are receiving financial aid, must first check with CEE Student Services to determine whether registration in the summer is required.

Course enrollment

Enrollment in courses opens approximately 2 months in advance of the start of a new quarter. Graduate students must file a study list (i.e., register for courses) for all terms of each academic year (autumn, winter, spring) until conferral of the degree. Enrolling in summer quarter is optional, the student is receiving financial aid. As per University policy, all units for a graduate degree must be in courses at or above the 100-level.

Graduate students must enroll for at least 8 units per quarter in Autumn, Winter and Spring. Permission to enroll in fewer than 8 units in the last quarter before qualifying for terminal graduate registration ([TGR](#)) status, or during the quarter of graduation may be granted by filing the appropriate petition from the Registrar (found on the [Graduate Student Forms page](#)) with the Student Services Center.

When enrolling in **individual study or thesis/dissertation units**, follow the [Registrar's step-by-step instructions](#). Click on the link "Shop for a Class" and select CEE. Enter the catalog number and the instructor's name. Alternatively, you may check the box "Include Individual Study Instructor Sections" to see a menu of class numbers by instructors. Select the correct section AND instructor to add it to your study list.

Academic Deadlines

Before the start of each quarter, you will receive an email from the Registrar's office explaining the registration requirements and deadlines. The Registrar also posts deadlines in the [academic calendar](#). If you miss a deadline you may incur a fee or possibly lose student status.

Key academic deadlines include:

- At-status enrollment deadline in order to receive stipend or financial aid refund by first day of term
- Preliminary Study List Deadline
- Final Study List Deadline
- Change of Grading Basis Deadline
- Course Withdrawal Deadline

Additional deadlines posted by the Registrar for each quarter with the academic calendar include:

- Deadline to submit Leave of Absence for full refund
- Term withdrawal deadline to submit Leave of Absence with a partial refund
- Application deadline for current Quarter degree conferral
- Late application deadline for current Quarter degree conferral (for a fee)

Petitions may be filed for missing various deadlines but they are not routinely accepted and if they are they will usually incur a fee.

Failure to register or take an approved leave of absence results in cancellation of registration privileges. If a student wishes to re-enroll, an [Application for Reinstatement in Graduate Study](#) form must be filed.

Units, Grades & Academic Performance

Graduate Units and Residency Requirement

Each graduate degree at Stanford has a [units-based residency requirement](#). The MS degree requires 45 units, the Engineer requires 90 units, and the PhD requires 135 units. Only completed course units may be counted toward the University residency requirement. A summary of these requirements as applied to CEE graduate degrees is shown in Table 1.

The CEE graduate degree program places further restrictions on the specific course work or combination of course work, research, and thesis units required for each graduate degree. All units counted towards graduate degrees in CEE must be in courses at or above the 100-level. Units earned in courses below the 100-level may not be counted towards the minimum residency unit requirement for a CEE graduate degree.

Table 1. Minimum units (residency) for CEE graduate degrees

| Degree | Minimum Number of Acceptable Units | Maximum Allowable Units of Stanford MS units or Transfer |
|-----------------------|------------------------------------|--|
| CEE-MS | 45 | 0 |
| <u>ENGINEERING-MS</u> | 45 | 0 |
| *CEE-Engineer | 90 | 45 |
| **CEE-PhD | 135 | 45 |

*Units completed for a Master's degree at Stanford may be applied to the 90-unit residency requirement for the Engineer degree.

** Units completed for a Master's degree at Stanford may be applied to the 135-unit residency requirement for the PhD degree. At least 90 units must be completed at Stanford and applied toward the PhD. Subject to CEE department chair approval, up to 45 units completed for the CEE-Engineer degree may also be used toward the 135-unit residency requirement for the PhD degree.

Transferring Residency Credit (for PhD or Engineer only)

If you completed graduate level course work or a Master's degree at another school, you may apply for transfer credit after completing at least one successful quarter of work at Stanford. Up to 45-quarter units of residency credit may be granted towards your Engineer or PhD degree by submitting an [Application for Graduate Residency Credit](#). When completing this form, if your previous school was on the semester system, multiply your semester units by 1.5 to calculate quarter units. Admissibility of residency credit from a foreign university is also evaluated. Students who have added a Stanford M.S. or M.A. degree to their PhD or Engineer programs, should consult with CEE Student Services and their academic advisor before applying for the transfer.

Grade Type Requirement

Courses taken to satisfy the requirements for a graduate degree (M.S., Engineer, or PhD) normally should be taken for a letter grade (A, B, C, or D). Core courses taken to satisfy a degree's subplan (A/E, EnvEng, EES, EFMH, SDC or SEG) require a Letter grade, with the following exceptions allowed:

1. a course is offered only on a satisfactory/no credit (S/NC) basis (including all S/NC courses taken in Spring 2020, Summer 2020, and during Academic Year 20-21)
2. there is no restriction on the number of units taken for CR/NC in Summer 2020, or during Academic Year 20-21 (Autumn 2020, Winter 2021, Spring 2021 and Summer 2021), which may be counted to satisfy the core and elective requirements for a CEE graduate degree.
3. if a program limits the number of S/NC or CR/NC units allowed to count towards a graduate degree, S/NC and CR/NC classes taken in Spring 2020, Summer 2020 and during AY20-21 will be excluded from this limit.

Students should inform themselves of the limits to the number of S/NC units their program will accept toward a degree.

Unless your program specifies otherwise, the Graduate School of Business (GSB) and Law School grading systems are considered to be graded units.

Credit/No Credit (not the same as S/NC)

Some courses are offered with the option of enrolling for a letter grade or for a credit/no credit (CR/NC) option. Normally, no more than 6 units on a graduate degree program may be taken for CR/NC – however, see previous section for the exception being offered for courses taken in summer 2020 and AY20-21. Normally, core courses for the subplans need to be taken for a grade if grades are offered – however, see previous section for the exception being offered for courses taken in Summer 2020 and AY20-21. Additional courses taken to correct deficiencies in a student's undergraduate background may be taken on a CR/NC basis if the advisor deems it appropriate and if these courses are taken *in addition to* the prescribed unit requirements for a degree. Normally, the purpose of the CR/NC grading option is to encourage students to try courses outside of their major field of study but not to avoid a letter grade for a course within the major field – however, during the Covid-19 pandemic, we are offering greater latitude (see previous section).

The University deadline for signing up for the CR/NC option in a course is set by the Registrar (See [Academic Calendar](#) for deadlines). Because the availability of the CR/NC option is subject to the consent of the instructor, the instructor may set an earlier deadline. Students are advised to consult with instructors and advisors early in the quarter if considering a CR/NC option.

Academic Performance

University-level requirements for academic performance can be found in the [Stanford Graduate Academic Policies and Procedures](#). Here, we will quote from just one section, on minimum progress requirements:

The academic requirements for graduate students include timely completion of university, department, and program requirements, such as admission to candidacy, successful completion of qualifying exams, and so on within the established time limits. Graduate students must also meet the following standards of minimum progress as indicated by units and grades. (These standards apply to all advanced degree programs except the School of Business PhD, and the M.B.A., J.D., L.L.M., J.S.M., J.S.D., M.D., and M.L.A., which follow guidelines issued by the respective schools and are described in their school bulletins.)

Graduate students enrolled for 11 or more units must pass at least 8 units per term by the end of each term. Those registered for fewer than 11 units must pass at least 6 units per term by the end of each term, unless other requirements are specified in a particular case or for a particular program.

In addition, graduate students must maintain a 3.0 (B) grade point average overall in courses applicable to the degree. Department requirements for minimum progress that set a higher standard for units to be completed, or a higher or lower standard for grade point average to be maintained, take precedence over the university policy; any such different standards must be published in the *Stanford Bulletin*.

The CEE department does have its own requirements that are outlined in detail under the descriptions of each degree program offered, beginning with the Masters degree on page 17.

Taking a Leave of Absence

A student who wishes to interrupt studies must obtain an approved leave of absence for any quarter(s) of the academic year in which they do not wish to be registered. Students are required to submit a [Petition for a Leave of Absence](#) prior to the first leave quarter, by the date posted in the Academic Calendar. New graduate students may not take a leave during their first quarter but they are permitted to request a deferment of up to one year. Co-terminal students must register for graduate studies during the first quarter past 180 units.

PhD students must have been admitted to candidacy in order to take a leave of absence. (If there are extenuating circumstances for not being admitted to candidacy prior to the leave, a student should consult with their adviser and CEE Student Services.) Their requested return quarter must be within the candidacy period, and any application for extension of leave must be accompanied by a dissertation progress report endorsed by their advisor.

The effective term of a student's program will not be changed by the time spent on a leave of absence. For example, the M.S. degree program allows a term of 3 years or 12 quarters before it is "expired". A leave of absence of 2 quarters will leave the student with 10 quarters in which to complete the degree.

Use of University Facilities during a Leave of Absence

Library Privileges Contact the Privileges Division, Green Library, to determine whether you may retain access and/or borrowing privileges while you are on leave.

Health Insurance A Leave of Absence processed by the Registrar's Office before the first day of instruction will cancel insurance coverage. Leaves processed after the start of classes will maintain health insurance fees and coverage for the quarter. Contact [Vaden Health Center](#), for additional information at 650-723-2135, or https://stanford.service-now.com/student_services

University Housing University housing is generally not available to students on leave. Students with questions about room-and-board refunds should contact the Stanford Housing Assignment Services or the central office of the University Dining Services (for board refunds). Students with medical disabilities that require university medical services and women students on leave of absence while expecting the birth of a child may petition to remain in campus housing for one term while on leave. Approval requires good academic standing, department recommendation, and no outstanding financial obligations to Stanford. Address questions to [Housing Assignment Services](#). Further questions may be directed to the Stanford Housing Assignment Services at 408 Panama Mall, Suite 101.

International Students Nonimmigrant students and their dependents must maintain an appropriate visa status at all times. An absence from the U.S. of 5 or more months will result in termination of F-1 or J-1 status. If a student remains outside the U.S. for 5 or more months, a new I-20 or DS-2019 is necessary for re-entry. For further information contact the [Bechtel International Center](#).

Financial Aid Prior to departure, students on Stanford fellowships should discuss with their advisor and the CEE Student Services Manager, the effect of a leave on their funding. Promises of financial aid upon return are conditional on availability of funds. <https://financialaid.stanford.edu/loans/>

Loan Repayment Students with outstanding loans should consider the effect of a leave on their loan status. The period of leave is counted by the lender as part of the total allowable grace period. If, during the leave period, the lender requests information on a student's registration status, Stanford is required to report non-registration. <http://gap.stanford.edu/5-3.html>

Extending a Leave of Absence

In the event that the student cannot return to active status at the end of the requested leave, a request for extension of leave of absence must be filed before the end of the leave period. Students in the M.S. or Engineer program or PhD students not yet admitted to candidacy require the approval of the Dean of the School of Engineering as well as the Chair of the CEE department.

Applying to Graduate

Graduation Quarter

Graduate students who have completed all of the requirements for their Engineer or PhD degree program except the final submission of a project, thesis, or dissertation may be eligible for one graduation quarter. This quarter allows the student to submit a dissertation or Engineer thesis. There is a registration fee of \$150.00. To qualify, students must have been registered as a full-time student (at least 8 units) in the preceding quarter. Graduate students who fail to complete their Engineer thesis, or dissertation during the *graduation quarter* will have to pay the applicable tuition for the following term(s) until the degree is awarded. To apply for the graduation quarter, students must submit a [Graduate Student Graduation Quarter Petition](#) in Axess. Please note: CEE-MS students are not eligible for Graduation Quarter status.

All students who intend to graduate must notify the University by filing an application to graduate through [Axess](#). You must be registered in the quarter you apply to graduate. Applications must be filed by the posted deadline.

Withdrawing or changing your application to graduate: In the event that you decide to withdraw from graduating, a paper form must be filed with the Registrar. To change any part of your application (e.g., wrong diploma name, wrong distribution instructions), students should contact the [Diploma Office](#), 08 Panama Mall, Suite 217, as soon as possible. Students who withdraw their application to graduate or who fail to complete degree requirements must file a new application to graduate in a subsequent quarter.

If you have a reasonable chance of finishing your degree requirements, then you should apply to graduate. It is easier to withdraw an application than to petition and add your name to the recommending list (and pay a late fee) after the deadline.

Changing Engineer or PhD advisor: In the event that you change your advisor, notify the department's student services office. Engineer and PhD students must file a "Change of Advisor or Reading Committee Member" form before you apply for conferral of your degree so that your student records will be updated. Failure to file this form will result in conflicting information when signatures are being checked upon submission of your thesis or dissertation.

Participation in June Commencement Ceremony

The academic year at Stanford University culminates with the yearly Commencement Ceremony at the end of spring quarter. University Commencement information can be found [here](#). If there is a reasonable chance that you will complete all requirements and be able to graduate at the end of Spring Quarter, you should apply by the posted deadline (typically in April). You may withdraw your name any time after the deadline, without charge.

If you do not plan on completing your degree by the end of Spring Quarter, yet graduation is probable within the next year, you may choose to “walk-through” the commencement ceremonies (both the general ceremony and the departmental one). To be eligible to ‘walk-through,’ MS students should have completed at least 36 units and have department and school approval, Engineer students need department/school approval, and PhD students should have completed their oral defense and have department and school approval.

Walking through the ceremony is no different from actually receiving your degree, except that instead of a diploma, you are handed an empty diploma cover. Petitions to walk through are available [here](#) and must be emailed to CEE Student Services by mid May.

Diplomas, Transcripts, Degree and Enrollment Verification

Diplomas are published for distribution at the end of Spring Quarter only. When applying for graduation in Axess, you will be asked about the manner in which you will receive your diploma. You may: (1) receive your diploma at the CEE Diploma Award Ceremony, (2) pick up your diploma at the Student Services Center, 2nd Floor, Tresidder Union after commencement, or (3) you may indicate a mailing address to which the diploma should be sent (be sure to check that your mailing address is correct on Axess). Diplomas will be sent out the week after Commencement.

<http://studentaffairs.stanford.edu/registrar/students/obtain-diploma>

Degree or enrollment verifications and transcripts may be requested through [Axess](#) or by referring the inquiring party to the [National Student Clearinghouse](#).

International Student Concerns

Bechtel International Center

The most current information for F-1/J-1 students and scholars is available at the website of the [Bechtel International Center](#).

Registration Requirement

For new students, the initial registration on [Axess](#) is blocked until the student attends one of the “Maintaining Legal Status” sessions held at the Bechtel International Center.

All graduate students holding F-1 or J-1 visas must register full time (8 units minimum) each quarter of the academic year (autumn, winter, spring). However, students who complete three consecutive quarters (may include summer) at full-time status may take a later quarter as vacation.

You should notify [Bechtel International Center](#) concerning any quarter out of sequence that you do not plan to register. Stanford University has a legal responsibility to notify the Department of Homeland Security (DHS) of any student who fails to register by the last day of registration.

Report on English Screening

Some students receive a conditional admission status as a result of English language screening. In this case, all Linguistics courses marked “REQUIRE” on the student’s Report on English Screening (a paper report that is given to students and sent to CEE Student Services) must either be satisfactorily completed or waived before degree conferral can be recommended or before requesting TGR status. Students who make exceptional progress in English during their first two quarters may consult with the Linguistics Department for review (and possibly a waiver) of the requirement.

Extensions of Stay

It is the student’s responsibility to keep track of matters concerning visas. Students holding F-1/J-1 visas are required to apply for an updated I-20/DS-2019 and show proof of financial ability if they change their degree level or if their academic program cannot be completed by the program end date listed on their I-20/DS-2019 (consult the [International Center](#) for details).

Employment

Students holding either an F-1 or J-1 visa may seek part-time (not to exceed 20 hours per week) employment on-campus during the academic year. During vacation periods, they may work full-time on-campus provided they intend to register the following quarter. J-1

students must obtain on-campus employment authorization via Axess prior to the start date of employment.

F-1 students are not permitted to work off-campus during the first 3 quarters of their studies in the United States. Students who would like to work off campus after that time may request work authorization (Curricular Practical Training or Optional Practical Training). Working off campus without work authorization is a violation of immigration regulations. For more information about CPT or OPT, contact an international student advisor at the Bechtel International Center. Spouses of those with an F-1 visa are not permitted to work.

J-1 students must request off-campus work permission from their visa sponsor (in most cases, Stanford) prior to working off-campus. Permission must be given in writing from the visa sponsor. J2 spouses who wish to work must obtain work authorization from the U.S. Citizenship and Immigration Services (USCIS).

Practical Training

A comparison of Curricular Practical Training and Optional Practical Training is available on the website of the [Bechtel International Center](#). Students who wish to pursue CPT are required to obtain their CPT advisor's consent, submit the on-line application in Axess and enroll in CEE398 under their CPT advisor's section number during the training period and report on the training to their CPT advisor.

Reporting a Change of Address

The DHS requires all non-immigrant and permanent residents (including international students, scholars and their families) to report any change of address. Reporting a change of address must be done within 10 days of such a change in Axess (<https://stanford.app.box.com/v/addressesinaxess>). The University must be able to track the whereabouts of international students. As such the Bechtel International Center strongly recommends careful attention to this often forgotten rule. For more information see: <https://bechtel.stanford.edu/immigration/address-updates>.

Social Security Number

The following students are eligible for a Social Security Number (SSN):

- ◆ F-1 students who have on-campus employment, or are receiving fellowships which requires employment or RA/Taships, or working off-campus on OPT or CPT
- ◆ J-1 students, who have a letter of permission to work from their sponsor. This could be Stanford or an outside organization, i.e. Fulbright.
- ◆ All J-1 Scholars
- ◆ J-2 spouses with work permission (EAD card)
- ◆ Employees in H-1B, TN or O-1 status

Taxes

All incoming students on the F-1 or J-1 visa will be considered non-residents for income tax purposes unless they have been in the United States previously. In general, payments to research and teaching assistants will be subject to federal taxation. Tax treaties with different foreign countries may mitigate some of the tax liabilities. Exemptions due to a tax treaty must be claimed personally by filing Form 8233 and the appropriate country attachment. Submit the completed 8233 Form and attachments to Payroll by:

- Off Campus: U.S. Mail to: Payroll & Records, Financial Management Services (FMS) Stanford University, University Hall, Floor 2, 485 Broadway Street, Redwood City, CA 94063, or
- On Campus: ID Mail to Payroll & Records, Interdepartmental Mailcode 8838, or
- In person at the University Cashier's Office, 459 Lagunita Drive, Tresidder Memorial Union Suite 7, Stanford.

The State of California is a separate taxing authority, and may impose a tax on non-resident students regardless of their federal tax status. Federal and state income taxes are due on April 15, for the previous tax year. The Bechtel International Center cannot provide any advice on tax related issues. Students are advised to seek professional advice.

Health and Safety

The department is committed to a strong program of accident and injury prevention and to compliance with all relevant environmental and health and safety regulations. Everyone within the department has responsibilities for ensuring a safe and healthy environment.

Health & Safety Training Programs

Safety regulations are stringent in industry and the Health & Safety (H&S) training is an important part of your preparation for a career in civil or environmental engineering. To ensure that everyone understands the importance and practical application of Stanford's H&S procedures, the department provides a three-tier training program. A certification attesting to that training must be on file with the department.

Tiers 1 and 2: All new faculty, staff, students and visitors must complete both Tier 1 and Tier 2 training. Tier 1 concerns general safety issues such as emergency response, earthquakes, accident reporting, and safety information resources (EHS-4200-CEE; General Safety/Emergency Prep). Tier 2 training covers chemical handling, storage, compressed gasses, and electrical safety and must be completed before using any labs (EHS-1900-CEE; Lab Safety/Chem Hygiene and EHS-2200-CEE; Compressed Gases Safety). CEE graduate students will fulfill the EHS-4200-CEE and EHS 1900-CEE requirement online – information on how to do this is provided at the CEE New Graduate Student Orientation, which is held the Thursday prior to the first day of instruction in Autumn Quarter.

Tier 3: This training is process and site specific, and is required before the student is permitted to become actively involved in laboratory work. The faculty advisor or a designee of the advisor generally administers this training.

What to do in the event of an accident/incident/exposure

In the event of an accident/incident/exposure, students should seek medical attention immediately. There are four options, depending on the severity of the injury and when it occurred.

OPTION 1: [Vaden Health Center](https://vaden.stanford.edu/) at 866 Campus Drive East (at Cowell Lane) is the preferred health provider for relatively minor injuries because of its close proximity and because most (but not all) care at Vaden involves no charge to students. Injuries for which care is available at Vaden include, but are not limited to, minor abrasions and contusions, superficial lacerations (skin), limited thermal and chemical burns, and possible fractures. <https://vaden.stanford.edu/>

OPTION 2: In a life-threatening condition such as a major injury, loss of consciousness, convulsion or difficulty breathing, call a paramedic and/or ambulance assistance at 9-911 on campus, or use a blue emergency phone. Call 911 if you are not on campus or are calling from your cell phone.

<https://vaden.stanford.edu/get-help-now/immediate-medical-help>

OPTION 3: Stanford Hospital Emergency is the preferred health provider for serious injuries (e.g., cyanide poisoning, ingestion of chemicals and laboratory gases, head injuries with loss of consciousness or visual changes, significant thermal or chemical burns, significant lacerations and fractures, serious dislocations, major crush injuries).

<http://stanfordhealthcare.org/medical-clinics/emergency-department.html>

OPTION 4: Private caregivers, if in the immediate area.

Accident Reporting

In the event of an accident involving an employee, a student, or a visitor, an [SU-17 Incident Investigation Report form](#) from [Environmental Health & Safety](#) must be completed and filed with the [Office of Risk Management](#) whether or not the injured or exposed person received medical attention. <https://ehs.stanford.edu/forms-tools/su-17-incident-investigation-report-employees>

Only employees are eligible for Workman’s Compensation. If a student is injured while working as a University employee (e.g., as a teaching assistant, research assistant, post-doctoral fellow, food service worker, or other type of service employee), the University will assume on a case-by-case basis, the costs of medical care and other benefits as required by Workman’s Compensation. When seeking medical assistance, the student should identify him/herself as an employee (not as a student) if employed by the University.

Counseling and Mental Health

Stanford University’s [Counseling and Psychological Services](#) (CAPS) is the university’s counseling center dedicated to student mental health and well being (650-723-3785; 24 hours a day). As specialists working with undergraduate and graduate students, they work to address student needs through an initial CAPS phone appointment offered the same day you call. CAPS provides a broad range of services including crisis counseling, individual therapy, medication assessment and management, group therapy, and couples counseling. A diverse and multicultural professional staff provides these services.

Emergency Numbers

| | |
|---|--------------|
| Emergency (on-campus) | 9-911 |
| Emergency (off-campus or from cell phone) | 911 |
| Stanford Hospital Emergency | 650-723-5111 |

Counseling & Mental Health Numbers

| | |
|---|---------------------------|
| Vaden Health Center Counseling (CAPS) | 650-498-2236 |
| Confidential Support Team (CST) (24-hour) | 650-723-3785 |
| Sexual Assault & Relationship Abuse | 650-725-9955 Support Line |
| YWCA Sexual Assault/Domestic Violence | 800-572-2872 (24 hour) |

Office of Accessible Education (OAE)

The [Office of Accessible Education](#) (located at 563 Salvatierra Walk; 650-723-1066) coordinates academic and other accommodations for undergraduates and graduate students who have disabilities including mobility impairments, chronic illness, sensory disabilities, learning disabilities, and psychological disabilities. The Office's goal is to enable students with disabilities to participate fully in the educational experience at Stanford while meeting the academic standards maintained by the university.

In accordance with the provisions of the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973, the OAE offers an array of accommodations and auxiliary aids and services to students with documented disabilities. Direct support services include, but are not limited to, notetaking, Braille, oral or sign language interpretation, stenocaptioning, MP3s or digital texts, examination accommodations, and appropriate housing accommodations. Requests for academic accommodations should be made within the first two weeks of the quarter or as soon as the need arises. Students must register with the OAE and provide documentation of their disability.

Disability Golf (DisGo) Cart Service is now managed by Stanford Parking & Transportation Services (PT&S). [DisGo](#) offers complimentary curb-to-curb service to all eligible students, faculty, or staff with a disability or medical condition. For more information or to schedule your rides, please check out the DisGo site or call (415) 404-1059.

Fellowships & Assistantships

Financial aid administered by the department includes fellowships and assistantships for research and teaching. Decisions regarding the type and amount of any Department of Civil and Environmental Engineering financial aid are made by the faculty. If you are receiving aid and have a question about the type or amount, you should speak with your advisor.

For timely receipt of stipends (pay) on the first day of the term and/or disbursement of the tuition allowance, graduate students must enroll in a minimum of 8 units (or TGR) by the “course enrollment deadline” for each quarter. For the dates, please refer to the [Academic Calendar](#).

Fellowships Assistantships

Fellowship funds will be mailed to the local mailing address the student has on file in [AXESS](#).

Assistantships offered include a Research Assistantship (RA), Teaching Assistantship (TA), and Course Assistantship (CA). If you receive an assistantship, your appointment begins on the first day of the month at the beginning of the quarter (October 1, January 1, April 1, and July 1). You will be paid for a three-month period. Checks are delivered semi-monthly on the 7th and 22nd of each month unless that day is on the weekend (in which case you are paid on the preceding Friday). You will receive your first check, covering the pay period from the 1st to the 15th, on the 22nd of the first month. If you have a Spring Quarter appointment, you will receive your last check on July 7. The checks and direct deposit stubs are available in the department’s student services office and usually arrive after 2pm on payday. Any tuition allowance provided as part of an RA, TA, or CA appointment must be used in the quarter the appointment is held.

Paperwork

If you will be receiving financial aid (i.e., RA, TA, or CA appointment), you must see the Student Services Manager in Y2E2 Room 314 to complete the required appointment and payroll forms.

Social Security Number: All students receiving financial support or wages from Stanford must have a U.S. social security number or ITIN (Individual Taxpayer Identification Number) on file with the University. Support provided and/or wages paid to students, scholars and fellows by the University are taxable for the recipient. If you do not have a social security number, apply for one at the Social Security Administration office (800-772-1213) at 601 Allerton Street (2nd Floor) in Redwood City. International students must first visit the Bechtel International Center to obtain a letter verifying their student status. An offer of employment is required to apply for Social Security Number.

I-9 (Employment Verification Form): Please see the following webpage to request an appointment to complete the I-9. <https://welcomecenter.stanford.edu/verify-eligibility-employment-i-9>. You will need to bring your work authorization document(s) in order to verify your I-9. Please refer to page 3 of I-9 for a complete list of accepted documents. For your convenience, a list of the most commonly submitted documents is listed here:

- 1) Students who are US Citizens: either a **or** b
 - a) Unexpired Passport
 - b) Driver's License **and** SSN card
- 2) Students on an F1 Visa: Unexpired Passport **and** Original I-20 **and** I-94 printout
- 3) Students on a J1 Visa: Unexpired Passport **and** Original DS-2019 **and** I-94 printout

Federal & State Tax Withholding Allowance (W-4/DE-4) forms are available on [Axess](#).

Direct Deposit Agreement form is available on [Axess](#) to have your paychecks deposited directly into your bank account.

Master of Science

Civil and Environmental Engineering

The master's degree is offered under the general regulations of the University as set forth in the [Stanford Bulletin](#). Some programs require their students to take prerequisites prior to entering their program. Check with the department's student services office for more information.

Masters Degree Offerings

The Department of Civil & Environmental Engineering hosts two ways to obtain a Master's degree as outlined below.

MS in Civil & Environmental Engineering

A Master of Science in Civil and Environmental Engineering may be obtained with a focus in one of five programs of study (often referred to as a "subplan") listed in Table 2.

Table 2. MS Degree Program and Faculty Coordinator

| MS Degree Program | Faculty Coordinator |
|---|------------------------------|
| Atmosphere and Energy | Mark Jacobson |
| Sustainable Design & Construction | Martin Fischer |
| Environmental Engineering | Ali Boehm and Oliver Fringer |
| Structural Engineering and Geomechanics | Kincho Law |

MS in Engineering

A Master of Science in Engineering is available to those who wish to follow a program of interdisciplinary study that does not conform to any of the pre-defined graduate programs in Civil and Environmental Engineering. The program must be approved by your advisor and the CEE department chair before being reviewed by the Office of Student Affairs in the Dean's Office in the School of Engineering (SoE). Students must submit their application for this degree to the department before they have completed 18 units of their degree.

Requirements

If you do not have a bachelor's degree in civil engineering (or its equivalent) from an accredited curriculum, you must complete those undergraduate courses that are considered important for entry into the CEE graduate program, including undergraduate courses that are prerequisites to the required graduate courses for your MS program. Each program outlines these requirements on their program websites. In meeting these requirements, you may need to enroll in more than 45 total units to obtain the master's degree, as only a limited number of undergraduate pre-requisite courses may be counted towards your M.S. degree.

Graduate students are advised to confer with their academic advisor to review program course requirements as well as identifying any deficiencies throughout their study. Any changes or adjustments to the program will require the advisor's consent.

Course Work

Students admitted to graduate study with the bachelor's degree in civil engineering (or its equivalent) from an accredited curriculum can normally satisfy the requirements for an MS degree by completing a minimum of 45 units of courses at Stanford following an approved program of study (Program Proposal for a Master's Degree) subject to the following conditions:

- For the [Master of Science in Civil and Environmental Engineering](#), at least 30 units must be at the graduate level (courses numbered 200 or above) and at least 24 units must be from the School of Engineering. In addition, each of the four CEE program areas (Table 2) has specific coursework and requirements designed to ensure the course of study has sufficient focus on appropriate CEE topics.
- The [Master of Science in Engineering](#) has three requirements:
 1. The program must be coherent with a well-defined objective
 2. The program of courses must include at least 21 units at the graduate level (courses numbered 200 or above) within the School of Engineering and for which the student receives a letter grade.
 3. Approval for the course of study must be obtained from the department and from the School of Engineering, before 18 units have been completed. For more details, see <https://exploreddegrees.stanford.edu/schoolofengineering/#masterstext>

No thesis is required for the Masters degree. Each program has limits on the number of non-graded units. Consult with your advisor as to the maximum units acceptable in your program for courses with the grade type of S/NC or CR/NC. Finally, your advisor and the department chairperson must approve your program of study (see the following page).

Co-terminal MS in CEE or Engineering must meet the requirements noted herein. No course taken prior to Autumn quarter of sophomore year may be used as part of the required 45 graduate units.

Non-acceptable Units

Units earned in courses below the 100-level are not accepted toward the minimum requirements for this degree. Non-technical courses, such as remedial English-language instruction (those checked as required on the Report on English Screening), music courses and physical education, may not be included in the 45 units of required course work. Students may take any courses they wish beyond the 45 program units.

Academic Performance

In order to be recommended for a Department of Civil and Environmental Engineering M.S. degree, students must achieve an average Grade Point Average (GPA) of at least 2.75 in the Stanford courses listed in the 45 units of graduate study on their Program Proposal for a Master's Degree. The GPA is calculated as follows: A=4, B=3, C=2 and D=1; a plus (+) modifier adds 0.3 and a minus (-) modifier subtracts 0.3.

Graduate Study Minimum Progress in CEE:

Course grades: Minimum GPA of 2.75 for M.S. degree students in the quarter being evaluated.

Credit hours passed: Students enrolled for 11 or more units must pass at least 8 units per term that count towards their degree by the end of each term. Those registered for 8-10 units must pass at least 6 units per term that count towards their degree by the end of each term.

Notification of not meeting Graduate Study Minimum Progress in CEE: Students are responsible for making sure they are meeting minimum progress as outlined above. Students who are not meeting minimum progress as outlined above will receive a Below Minimum Progress Notification letter from the CEE Department Chair during the subsequent quarter. Students will have the option to take a leave of absence after a quarter of not meeting minimum progress and may wish to initiate this before the subsequent quarter begins. A second leave of absence must be approved by the Department Chair and is only permissible for students meeting minimum progress requirements.

Students who are not meeting minimum progress for two consecutive quarters will receive a department hold on their enrollment. As informed in their first notification letter, students will have the option of taking a Voluntary Withdrawal from the Degree Program. If the student chooses not to withdraw from the program, a faculty committee will meet to review the student's case for dismissal from the university and if dismissed, the student will receive a Notification of Dismissal Letter.

Program Proposal for a Master's Degree

No degree can be recommended for conferral unless a Program Proposal for a Master's Degree has been filed and represents an accurate program of study. Meet with your advisor during your first quarter of graduate study to agree upon a proposed program of coursework. By the beginning of the second quarter of study, submit a Program Proposal for a Master's Degree; regardless of how many quarters it will take you to complete the requirements (45 units) for the degree. You may fill out the electronic form from the [registrar's website](#).

List courses in the order in which they will be taken, grouped by quarter and including only the 45 units that should be considered for the degree. When your advisor and the department chair have approved this form, this list of courses becomes your official program of study for the master's degree.

Revising your Program Proposal

If your actual course work changes after submitting the [Program Proposal for a Master's Degree](#), you must email to CEE Student Services (Y2E2 316), a revised form approved and signed by your academic advisor. This form is typically submitted only once, before the end of the second week of the final quarter of your program of study, when all changes to the proposed course work have already been made. With approval from your advisor and the Department Chair, the revised list of courses becomes your official program of study for the Master's degree.

Extending Your Program

All master's degree students have three years beginning with the first quarter of enrollment to complete their master's degree program with the exception of (1) honors cooperative students who have five years from the beginning of their first quarter of enrollment in the program, (2) co-terminal students who have three years after the quarter in which they have completed the 180 units for their undergraduate degree, and (3) students with 2-year visas – since the CEE-MS program does not require research or a thesis, the U.S. Government does not allow our department to approve a request for a visa extension unless there is a documented medical reason for not having been able to complete the MS within 2 years.

These time limits are referred to as program authorization and are based on calendar years, not registration quarters. Leave of absences do not extend or expedite the expiration of the program authorization.

Review your situation with your advisor as soon as you realize that you may be unable to complete the requirements of your program of study within the prescribed time limits. If it is agreed that more time will be required, you must submit an [Application for Extension of Candidacy](#) and [Master's Program Proposal](#) before your program authorization expires. This form may be used to extend the time limits for completion of your master's degree program for up to one year. Extensions require a review of your academic progress and advisor approval. After obtaining your advisor's signature, submit both of the above forms to CEE student services.

Post-MS Study at Stanford

Post-MS Study for Engineer or PhD Degree

If you have been admitted to Stanford to study for a master's degree and wish to continue study for the department's Engineer or PhD degree, you must email a completed and signed [Application for PostMaster's Study](#) by January 15th of the calendar year of the proposed start of post-MS study to CEE Student Services, Y2E2 Room 316, so that your application may be reviewed during the normal admissions cycle. You may apply at a later date if your advisor feels that is appropriate to do so.

On your application, specify the faculty person with whom you wish to study. If you do not specify a faculty member your application will be forwarded to the program you are interested in for evaluation. You will be notified by email once a final decision is made.

If admitted, you will receive a letter of admission from your advisor for that program and you must submit a [Graduate Program Authorization Petition](#) through [Axess](#) so that the new degree program is activated in your university record. Be sure to indicate your anticipated admit start quarter and your subplan (CEEENG3 or CEEPHD3 for EES, CEEENG5 or CEEPHD5 for EFMH, CEEENG6 or CEEPHD6 for SEG, CEEENG10 or CEEPHD10 for SDC, CEEENG9 or CEEPHD9 for A/E). Do *not* check the box to discontinue any of your other Academic Careers.

NOTE: Conferral of a degree will inactivate any student registration privileges, therefore this step of submitting a [Graduate Program Authorization Petition](#) through [Axess](#) needs to be completed before your application for MS degree conferral has been approved by the department.

Second MS Degree

Master's students may also apply for a second master's degree within the Department of Civil and Environmental Engineering or in another department. The second MS degree is subject to the same general requirements as the first. None of the 45 units of course work used to complete the requirements for the first degree may be applied for the second MS degree program. Some seminars and directed study courses can be repeated if the subject matter is different during the second degree.

Each department has a different approach to admission for a second MS so it is important to check with their student services office. In the Department of Civil & Environmental Engineering, you must submit an [Application for Post-Master's Study](#) to the student services office of the department for the second MS. Any financial aid granted for this study should be verified by a letter of admission from the program. Logon to [Axess](#) and submit a [Graduate Program Authorization Petition](#), specifying an "Additional Degree Program" as the requested change, and be sure to specify your subprogram (CEEMS11 for

Environmental Engineering, CEEMS6 for SEG, CEEMS10 for SDC, CEEMS9 for A/E). Do *not* check the box to discontinue any of your other Academic Careers.

NOTE: Conferral of a degree will inactivate any student registration privileges therefore this step of submitting a [Graduate Program Authorization Petition](#) through [Axess](#) needs to be completed before your application for MS degree conferral has been approved by the department.

Engineer

Civil and Environmental Engineering

The Engineer degree is offered under the general regulations of the University as set forth in the [Stanford Bulletin](#). This degree is recommended for students who expect to engage in a professional career in industry. The program is rigorous and should be undertaken only by students with the ability for independent work. It requires a minimum of 90 units beyond the Bachelor's degree; most students take 2 or more years to complete their thesis. Students must be admitted to candidacy and must complete a thesis.

Graduate students who lack adequate background in their area of degree specialization or who are not full-time students will likely need to enroll in more than 90 units. Engineer degree candidates should develop individually tailored expected-progress timetables in consultation with their program advisors.

Applying for the Engineer Degree as a Current MS Student

If you are currently pursuing a master's degree at Stanford and wish to apply for the Engineer degree, email an [Application for Post-Masters Study](#) to CEE Student Services, Y2E2 Room 314. This form is typically filed during your second quarter of graduate study, preferably before January 15th, so that your application may be reviewed during the normal admissions cycle. You may apply at a later date if agreed upon with your advisor.

Your application will be forwarded to the appropriate program for evaluation, and you will be notified by mail of their decision and who your Engineer Program Advisor will be. Please note that your CEE advisor for the Engineer Program must be a member of Stanford's Academic Council. A nonAcademic Council member may serve as co-advisor. If you are accepted for Engineer degree study, the next step is to logon to [Axess](#) and submit a [Graduate Program Authorization Petition](#), requesting a "Change of Primary Graduate Degree Program". Be sure to specify your subprogram (CEEENG3 for EES, CEEENG4 for EFMH, CEEENG6 for SEG, CEEENG10 for SDC, or CEEENG9 for A/E).

NOTE: Conferral of a degree will inactivate any student registration privileges therefore this step of submitting a [Graduate Program Authorization Petition](#) through [Axess](#) needs to be completed before your MS degree is conferred.

Residency & Program Requirements

A minimum of 90 units of full-time graduate study (or equivalent part-time graduate study) is required for the Engineer degree. For most students, the master's degree supplies 45 of these units. If your master's degree was obtained at another school, you

can apply to transfer up to 45 units of residency credit by completing an [Application for Graduate Residency Credit](#). No units need to be transferred if you hold an MS degree from Stanford. Note that 45 units refers to units in a quarter system and you will need to convert semester units into quarter units if your previous master's degree is from a school on the semester system. Guidelines are given on the form.

The Program Requirements of 45 post-MS units for an Engineer Degree in Civil & Environmental Engineering must meet the following requirements:¹

- All 45 units must be 100+ level, and at least half (23 units) must be 200+ level.
 - No more than 6 out of these 45 units may be taken on a CR/NC basis (student elected). However, there is no limit on S/NC units.
 - No PE or MUSIC units may be counted as part of these 45 units.
 - All 45 units must be approved by your advisor as relevant to your ENG studies.
 - Your thesis research must be conducted at Stanford and normally should begin during the first quarter of study after the master's degree.
 - Your advisor and the department chair must approve your program of study by signing the completed [Application for Candidacy for the Degree of Engineer](#) form (see section on this topic below).
- a. At least 24 of these 45 post-MS units must consist of lecture- or laboratory-style classes. [Note: Your program or advisor may require more than this 24-unit minimum.] To qualify as lecture- or laboratory-style, these 24 units must meet the following constraints:
- i. No independent study (INS), activity (ACT), or research (RES, RSC) classes may count. (Class type for each course is in the Schedule pulldown, on explorecourses.stanford.edu)
 - ii. No seminar-style classes may count. These are often (but not always) under the class type SEM or COL; the course title or description may feature words like seminar or colloquium. The CEE department defines a class as seminar-style if >50% of the class meeting time is devoted to guest speakers and/or student presentations. However, Engr103 may count.
 - iii. 1-unit courses may count towards these 24 units only if they are CME workshops (WKS), or CEE265D. No other 1-unit courses may count.
 - iv. No EFSLANG courses may be counted as part of these 24 units.
- b. The other up to 21 units in this category may include:
- i. INS, ACT, RES and RSC classes, and thesis units (e.g., CEE299, 300, 365A, 370A, 381).
 - ii. Seminar-style classes and 1-unit courses.
 - iii. EFSLANG courses, if required or strongly recommended on the English assessment form.

¹ Students who were admitted to the ENG degree before October 2019 may choose to be grandfathered in to the previous set of requirements (available by request from Jill Filice, the CEE Students Services Admin.).

Application for Candidacy for the Degree of Engineer

Review the requirements for the degree then meet with your Engineer Degree advisor during your first quarter of Post-MS study to agree upon a proposed program of study. Before the last week of the second quarter of study, complete an [Application for Candidacy for the Degree of Engineer](#) (approved and signed by your academic advisor) and email it to CEE Student Services in Y2E2 Room 314 or 316. The submittal of this form is a University requirement and admits the student into candidacy.

Changing your Academic Program

If your actual course work changes after submitting the [Application for Candidacy for Degree of Engineer](#) you must submit to CEE Student Services (Y2E2 316) a revised form approved and signed by your academic advisor. This form is typically submitted only once, before the end of the second week of the final quarter of your program of study, when all changes to the proposed course work have already been made. With approval from your advisor and the Department Chair, the revised list of courses becomes your official program of study for the Engineer degree.

Extension of Candidacy

If you will be unable to complete the requirements of your Engineer degree program of study within five years, you must complete an [Application for Extension of Candidacy](#) form and have your advisor sign for approval. This form may be used to extend the time limits for completion of your Engineer degree program for up to one year. Extensions require a review of your academic progress and approval from the department chairperson. Email the completed form to the CEE Student Services office, Y2E2 Room 314, for the Department Chair's signature and processing.

Academic Performance

In order to be recommended for the Engineer Degree in the Department of Civil & Environmental Engineering, students must achieve an average GPA of at least 3.0 in the Stanford courses listed in the 45 units of graduate study on their *Program Proposal for an Engineer Degree*. The GPA is calculated as: A=4, B=3, C=2 and D=1; a plus (+) modifier adds 0.3 and a minus (-) modifier subtracts 0.3.

Graduate Study Minimum Progress in CEE:

Credit hours passed: Students enrolled for 11 or more units must pass at least 8 units per term that count towards their degree by the end of each term. Those registered for 8-10 units must pass at least 6 units per term that count towards their degree by the end of each term.

Course grades: Minimum GPA of 3.0 for Engineer students in the quarter being evaluated.

Notification of not meeting Graduate Study Minimum Progress in CEE: Students are responsible for making sure they are meeting minimum progress as outlined above. Students who are not meeting minimum progress as outlined above will receive a Below Minimum Progress Notification letter from the CEE Department Chair during the subsequent quarter. Students will have the option to take a leave of absence after a quarter of not meeting minimum progress and may wish to initiate this before the subsequent quarter begins. A second leave of absence must be approved by the Department Chair and is only permissible for students meeting minimum progress requirements.

Students who are not meeting minimum progress for two consecutive quarters will receive a department hold on their enrollment. International students will not be granted an extension to their I20's. As informed in their first notification letter, students will have the option of taking a Voluntary Withdrawal from the Degree Program. If the student chooses not to withdraw from the program, a faculty committee will meet to review the student's case for dismissal from the university and if dismissed, the student will receive a Notification of Dismissal Letter.

Submission of Thesis

The acceptance of the Engineer thesis by the department and the university will be the final step prior to degree conferral. Plan to consult with the graduate degree progress officer in the Registrar's Office, to review format requirements for the thesis, prior to submission. Guidelines and deadlines for electronic thesis submission may be found [here](#). Instructions and deadlines for hard copy thesis submissions to the Office of Graduate Degree Progress are found [here](#).

Terminal Graduate Registration (TGR).

It is recommended to apply for TGR status as soon as you are eligible so as to reduce your tuition payments. To be eligible for TGR status as an Engineer Degree student you must have:

- Satisfactory completion of all courses on the Application for Candidacy for Engineer Degree form. If the program has changed a new form must be approved by your advisor and submitted to CEE Student Services, Y2E2 316.
- Accrual of 90 completed units of residency prior to TGR start quarter and completed residency requirement for all active and completed degree programs.

When you've fulfilled the above requirements, complete a [Request for TGR](#) status eForm. After obtaining your principal advisor's signature, submit the form to the department's student services office. Be sure to file your request form before the start of the first quarter in which you would like to have TGR status.

NOTE: Students with “required” or “strongly recommended” remedial English courses may not include those credits in the 45 degree program-specific units on their Application for Candidacy for the Degree of Engineer; however these units may be part of the overall total units. These requirements must be met before TGR status is requested.

Registration with TGR Status

Students with TGR status should enroll in CEE 801 Thesis Project using the section number assigned to their principal advisor and should continue to enroll in CEE 801 every quarter until conferral of the degree.

Each quarter, your principal advisor will evaluate your thesis work as a measure of continued academic progress, and you will receive a grade of either:

- N or S indicating satisfactory progress prior to the final quarter of TGR status and graduation.
- N- indicating unsatisfactory progress prior to the final quarter of TGR status and graduation. In the final quarter of TGR, in order to graduate, a grade of S should be given.

If you receive an N- grade for any quarter, you should meet with your advisor and work out a satisfactory plan for completing degree requirements. Subsequent N- grades may be grounds for dismissal.

PhD

Civil and Environmental Engineering

The **Doctor of Philosophy** degree is offered under the general regulations of the University as set forth in the [Stanford Bulletin](#). This degree is recommended for those who expect to engage in a professional career in research, teaching, or technical work of an advanced nature in civil or environmental engineering.

A PhD at Stanford requires a minimum of 90 units of graduate study beyond the Masters degree. PhD students who arrive at Stanford with a Masters degree that did not provide adequate background in their area of specialization may be required take additional units beyond this minimum as part of their PhD studies. Students who are directly admitted to the PhD without a Masters degree are required to take a total of 135 units of graduate study. The department requires CEE PhD students arriving without a Masters degree to take sufficient coursework each quarter, until the GQE is completed, to satisfy the requirements for a CEE Masters degree by the end of their 6th non-summer quarter of PhD studies. Once the GQE is completed, steady progress towards the MS is no longer required. PhD candidates should develop individually tailored study plans and expected-progress timetables in consultation with their thesis advisors. To provide additional guidance on the pathway toward completion of the PhD degree, a flowchart of academic and administrative responsibilities is available from the Department office, Y2E2 Room 314.

Applying for the PhD Program as a Current MS or Engineer Degree Student

If you are currently working towards a Master of Science or Engineer degree at Stanford and wish to continue study for a PhD in Civil & Environmental Engineering, you must fill out an [Application for Post-Masters Study](#). The completed form should be emailed to Student Services during your second quarter of graduate study, preferably before January 15, so that your application may be reviewed during the normal admissions cycle. You may apply at a different date if your advisor feels that it is appropriate to do so.

Your application will be forwarded to the appropriate program for evaluation, and you will be notified by email of their decision. If admitted your admission letter will come from your CEE PhD advisor. Your CEE PhD Advisor must be a member of Stanford's Academic Council. A non-Academic Council member may serve as co-advisor. If you are accepted for PhD degree study, the next step is to logon to Axess and submit a [Graduate Program Authorization Petition](#), requesting a "Change of Primary Graduate Degree Program. Be sure to specify your subprogram (CEEPHD9 for A/E, CEEPHD11 for Environmental Engineering, CEEPHD5 for Geophysics, CEEPHD6 for Structural Engineering, CEEPHD10 for SDC).

NOTE: Conferral of a degree will inactivate any student registration privileges therefore this step of submitting a [Graduate Program Authorization Petition](#) through [Axess](#) needs to be completed before your MS or Engineer degree is conferred.

Residency and Program Requirements

The PhD requires completion of a minimum of 135 graduate units, with a GPA of at least 3.0. These 135 units can be divided into three subgroups, as follows:

- I. Credit for up to 45 units can be satisfied by an MS degree or its equivalent, via one of these routes:
 - a. For an MS degree from Stanford, the MS units are credited automatically.
 - b. To receive up to 45 units of credit for an MS degree from outside of Stanford, the student must fill out and submit an [Application for Graduate Residency Credit](#).
 - c. A PhD student admitted with no MS degree must take sufficient coursework each quarter, until the GQE is completed, to satisfy the requirements for a CEE Masters degree by the end of the 6th non-summer quarter of their PhD studies (see next page). MS conferral is optional, but steady progress towards the MS, prior to completing the GQE, is required.
- II. Completion of at least 45 units, beyond MS-level studies, must meet the following requirements²:
 - All 45 units must be 100+ level, and at least half (23 units) must be 200+ level. Some programs in CEE may require a larger portion of 200+ level courses.
 - No more than 6 out of these 45 units may be taken on a CR/NC basis (student elected). However, there is no limit on S/NC units.
 - No PE, MUSIC, or EFSLANG units may be counted as part of these 45 units.
 - No thesis/dissertation units (CEE300 or 400) may be counted as part of these 45 units.
 - All 45 units must be approved by your advisor as relevant to your PhD studies.
 - a. At least 24 of these 45 post-MS units must consist of lecture- or laboratory-style classes. [Note: Your program, advisor or GQE committee may require more than this 24-unit minimum.] To qualify as lecture- or laboratory-style, these 24 units must meet the following constraints:
 - i. No independent study (INS), activity (ACT), or research (RES, RSC) classes may count. (Class type for each course is in the Schedule pulldown, on explorecourses.stanford.edu.)
 - ii. No seminar-style classes may count. These are often (but not always) under the class type SEM or COL; the course title or description may feature words like seminar or colloquium. The CEE department defines a class as seminar-style if >50% of the class meeting time is devoted to guest speakers and/or student presentations. However, Engr103 may count.

² Students who began their PhD studies before September 2018 may choose to follow the previous version of these requirements. Ask CEE student services (rm 316) if you wish to see the pre-2018 requirements.

- iii. 1-unit courses may count towards these 24 units only if they are CME workshops (WKS), or CEE265D. No other 1-unit courses may count.
 - iv. Units for a PhD minor may be counted here only if both the advisor and GQE committee approve of these courses as relevant to the PhD studies.
 - v. At least 1 course of 3 or more units from each of 4 different Stanford faculty members (assistant, associate or full professors) must be completed prior to the GQE.³ Courses taught by lecturers, or by visiting or adjunct professors, cannot count here.
 - vi. Up to 6 units of CR from classes that could have been taken for a Letter grade may be counted here.
- b. The other up to 21 units in this category may include:
- i. CEE200A (or B or C) and 379 (both required before going TGR or defending thesis)
 - ii. INS, ACT, RES and RSC classes within CEE (e.g., CEE299, 399, 365A, 370A, 381)
 - iii. Additional courses that are consistent with requirements (a.i)—(a.iv) listed above
- III. For the remaining graduate coursework needed to reach a total of 135 completed units:
- All courses must be 100+ level
 - Up to 45 thesis units (CEE399 or 400) may be included
 - Courses of all class types may be counted here (including SEM, COL, INS, ACT, RES)
 - Additional CR/NC units may be counted here
 - Any units for a PhD minor not counted previously may be counted here
 - EFSLANG courses, if required or strongly recommended on the English assessment form, may be counted here, and must be completed before going TGR (or defending thesis).

Additional Requirements for PhD Students Admitted without an MS

For PhD students admitted without an MS, additional requirements and milestones are:

- If admitted to the PhD without an assigned PhD advisor, you must take at least 1 unit of graded independent study (CEE299L) each quarter, under the supervision of a CEE faculty member, until you identify who will serve as your dissertation advisor.
- By end of spring of year 1, you must reach a mutual agreement with a CEE faculty member to serve as your PhD advisor, and submit signed paperwork to CEE student services documenting this.
- By the end of autumn of year 2, you must complete and submit the [General Qualifying Exam \(GQE\) form](#), scheduling your General Qualifying Exam (GQE). The deadline for passing both parts of the GQE, for a summer or autumn start, is the end of spring in year 2.
- You must take sufficient coursework each quarter, until completing the GQE, to satisfy the requirements for a CEE Masters degree by the end of your 6th non-summer quarter of PhD studies. This may be either within a CEE program, or for a general CEE MS (see next bullet). You may fill out paperwork to have an MS degree conferred, but this is not

³ Students admitted directly to the PhD without an MS may use classes taken in sub-group I (towards the MS-equivalent) to satisfy this 4 Stanford faculty member requirement for advancing to candidacy.

required. Units taken beyond these 45 may count towards the post-MS requirements (described above).

- If you choose the general CEE MS requirements (open only to direct-admit PhDs who have secured a PhD advisor), the following requirements must be met:
 - 45 units of coursework in classes numbered 100+, with a coherent focus
 - Course of study must be planned in collaboration with, and with the approval of, your CEE PhD advisor and either the CEE Department Chair or Associate Chair
 - At least 36 units must be taken for a letter grade
 - At least 30 units must be graduate level (numbered 200+)
 - At least 27 units must be CEE courses
 - A maximum of 3 units may be seminars
 - A maximum of 6 units may be independent study or research courses
 - No remedial English language, physical education or language classes may count
 - None of these 45 units may be double-counted towards a PhD minor, or towards the post-MS requirements

Academic Performance

In order to be recommended for the PhD Degree in the Department of Civil and Environmental Engineering, students must achieve an average GPA of at least 3.0 in the Stanford courses listed in the 45 units of post-MS coursework on their [*Application for Candidacy for Doctoral Degree*](#). The GPA is calculated as: A=4, B=3, C=2 and D=1; a plus (+) modifier adds 0.3 and a minus (-) modifier subtracts 0.3.

Graduate Study Minimum Progress in CEE:

Course grades: Minimum GPA of 3.0 for PhD degree students in the quarter being evaluated.

Credit hours passed: Students enrolled for 11 or more units must pass at least 8 units per term that count towards their degree by the end of each term. Those registered for 8-10 units must pass at least 6 units per term that count towards their degree by the end of each term.

For the PhD degree:

- **General Qualifying Exam:** The university expects all PhD students to complete departmental qualifying procedures and apply for candidacy within two years (24 months) of beginning the PhD program. A leave-of-absence does not extend this deadline, except for pregnancy and parental leaves.
- **Candidacy time limit:** All requirements for the degree must be completed before candidacy expires. Candidacy is valid for five calendar years (through the end of the quarter in which candidacy expires), unless terminated by the department (for example, for unsatisfactory progress). The time limit is not extended by a student's leave of absence, except for pregnancy and parental leaves.

Notification of not meeting Graduate Study Minimum Progress in CEE: Students are responsible for making sure they are meeting minimum progress as outlined above. Students who are not meeting minimum progress as outlined above will receive a Below Minimum Progress Notification letter from the CEE Department Chair during the subsequent quarter. Students will have the option to take a leave of absence after a quarter of not meeting minimum progress and may wish to initiate this before the subsequent quarter begins. A second leave of absence must be approved by the Department Chair and is only permissible for students meeting minimum progress requirements.

Students who are not meeting minimum progress for two consecutive quarters will receive a department hold on their enrollment. International students will not be granted an extension to their I20's. As informed in their first notification letter, students will have the option of taking a Voluntary Withdrawal from the Degree Program. If the student chooses not to withdraw from the program, a faculty committee will meet to review the student's case for dismissal from the university and if dismissed, the student will receive a Notification of Dismissal Letter.

Selecting a Research Area & Principal Advisor

In most cases students are admitted to the PhD Program by their Principal Advisor with an already agreed upon research area. If you are admitted into the PhD program without a principal PhD advisor, you must enroll in at least 1 unit of CEE299L each quarter with CEE faculty members who might serve as your PhD advisor. You are encouraged to rotate, and expected to secure a principal PhD advisor by spring of your first year. Some letters of admission for students with outside sources of funding may specify more explicit deadlines, steps and/or requirements for identifying a principal advisor.

It is the student's responsibility to find a principal advisor. Faculty members are more likely to accept the responsibility of supervising the research of a student whose abilities, initiative, and originality are fairly well known to them. Agreeing to work together on a dissertation research project is a serious commitment between a student and principal advisor.

The availability of faculty members to serve as principal advisors on dissertations limits the number of students that can be recommended for candidacy. An award of financial support (research assistantships, traineeships, and teaching assistantships) for the second year of graduate study does not assure that the faculty will recommend approval of a student's application for candidacy.

The Principal or Primary Doctoral Program or Doctoral Dissertation Advisor must be a CEE professor who is a member of the Academic Council. On occasion, a non-Academic Council member may serve as a co-advisor, however they must be approved by the Department Chair.

Change of Advisor or Reading Committee Member

If you must change your advisor or a reading committee member (see section below on Dissertation Reading Committee), email a [Change of Dissertation Adviser or Reading Committee Member](#) form to the CEE Student Services office, Y2E2 316. Failure to do so will result in a delay of approval for the dissertation until student records are correct.

PhD Requirements: Three Courses + One Orientation

CEE379: Introduction to PhD Studies Seminar: This one-unit seminar course, offered every Autumn quarter, will include faculty research presentations; presentations and discussion on career development; discussion on how to explore research and advisor options; and the GQE requirements for all PhD students. Completion of this seminar course is required for all PhD students by Autumn quarter of Year 2 of their PhD, and is recommended at the beginning of their graduate studies.

Because pedagogy and teaching and learning are so important to the careers of many Ph.D. graduates, three required steps focused on these topics (one orientation and two 1-unit courses) are required for all Ph.D. candidates:

Orientation: The first step in the required educational process before serving as a teaching assistant (TA) is completion of the university's 3-hr TA Orientation, offered at the beginning of each quarter by the Center for Teaching and Learning (CTL).

CEE200: Seminar on Teaching for TAs: This one-unit seminar, offered every Autumn quarter, introduces students to effective teaching practices and engineering pedagogy for Teaching Assistants. This course is the 2nd step in the required TAing educational process for all PhD students, and should be completed by Autumn of year 2.

CEE200A or B or C: Teaching of Civil & Environmental Engineering: This one-unit class, offered Aut/Win/Spr, is the final step in this requirement. It should be taken concurrently with the first time serving as a teaching assistant at Stanford. PhD students cannot advance to TGR status until all 3 educational steps for TAing have been completed.

Entering Candidacy: General Qualifying Exam (GQE)

Admission to the PhD program gives a student the status of being a PhD student but does not imply having been admitted to candidacy for the PhD degree. The designation of "PhD candidate" is reserved for students who have passed the department's General Qualifying Exam and have submitted an approved program of PhD course work on an [Application for Candidacy for Doctoral Degree](#).

The general qualifying examination is designed to ensure that students have an in-depth understanding of the fundamental aspects of material related to graduate-level coursework

and that they have a thorough knowledge of the literature in their proposed area of research. The GQE is a two-part exam lasting a total of no more than 180 minutes. Part I of the GQE consists of an oral examination administered by at least three academic council faculty members. The makeup of the committee must follow all University and CEE departmental requirements. Part I of the GQE focuses on coursework material related to the candidate's PhD field of study, and/or tests the candidate's understanding of a literature review related to their PhD field of study. Part II consists of a written proposal that is presented either publicly or to the GQE committee in private. This presentation is followed by a questioning session from the GQE committee in private. Students must pass both parts of the GQE in order to advance to candidacy.

The key events leading to candidacy and granting of the PhD degree are:

- Complete the Intro to PhD Studies (CEE 379) seminar by fall quarter of your 2nd year as a PhD student
- Obtain approval from your identified primary advisor to sit for the GQE by filling out the General Qualifying Exam form, obtaining your advisor's signature, and submitting the completed, signed form to CEE student services. The composition of the GQE committee must be approved by the CEE Department.
- Complete GQE Part I: Oral examination
- Complete GQE Part II: Written proposal presentation
- Complete TAing educational requirements [previous section] and TA at least 1 class

Scheduling the GQE

Stanford University expects PhD students to complete their GQE and advance to candidacy within 2 years of the start date for PhD studies. No extensions to this milestone are allowed by the university for leaves of absence, except for pregnancy and parental leaves.

As described in the next section, the first step in this process, the [General Qualifying Exam](#) form must be completed and submitted at least 2 quarters before this deadline.

The Table on the right shows the GQE Part II completion deadline. It is almost always infeasible to schedule a GQE committee meeting in the summer, so Part II of the GQE should be completed by the end of the student's 6th non-summer quarter as a PhD student at Stanford. PhD students who start in Autumn, and wish to complete their GQE in summer, must submit the GQE form, showing the specific summer date and time (to which all 3 committee members have agreed) by the end of Autumn Quarter (since their default deadline for completion, shown in this Table is Spring).

| <u>First Quarter as Admitted PhD Student</u> | <u>GQE Part II Completion Deadline</u> (6 th non-summer PhD quarter) |
|--|--|
| Summer or Autumn Qtr | End of 2 nd Spring Qtr as PhD |
| Winter Qtr | End of 2 nd Autumn Qtr as PhD |
| Spring Qtr | End of 2 nd Winter Qtr as PhD |

If Part I of the GQE is a coursework exam, it should be completed no later than two quarters before the deadline established for Part II. If Part I of the GQE is a literature review, it may be scheduled prior to, or at the same time as, the GQE Part II. Regardless of GQE format, all PhD students are expected to complete both parts of the GQE by their 6th non-summer quarter.

Paperwork needed for the GQE

As the PhD student, you are the person empowered to keep track of GQE deadlines, to anticipate what deliverables must be prepared, and to remind your advisor about scheduling your GQEs.

- 1) At least two (2) quarters prior to the scheduled GQE II (or GQE I + II) examination date, (and at least 2 weeks prior to the scheduled GQE I if taken separately), you must submit to CEE Student Services (Y2E2 316):
 - The [General Qualifying Exam](#) form, with the top portion completed, listing your GQE exam date(s) and time(s), and the members of your GQE committee. Your principal advisor must have signed the signature line in the top half of the form to indicate their consent to sit for your exam. Your advisor will complete the rest of this form following the exam.
- 2) At least two (2) weeks prior to the scheduled GQE I (or GQE I + II) examination date, you must submit to CEE Student Services (Y2E2 316):
 - A draft of your Application for Candidacy for Doctoral Degree (to allow your examiners to assess the adequacy of your proposed PhD coursework plan in supporting your proposed research). Prior to candidacy (= completion of GQE Part II), the University requires that at least 3 units of coursework must be completed with each of four Stanford Academic Council faculty members.
 - A copy of your Program Proposal for the Master's Degree if you received your MS from a different department at Stanford

Format for the GQE

GQE Part I: Oral Exam

The GQE Part I exam focuses on either coursework or a literature review. The goal of this part of the exam is for the student to demonstrate a strong understanding of the field(s) relating to the potential focus of their thesis.

As a general rule, the format for Part I depends on the CEE program, as follows:

- Coursework GQE I (typically completed 2 quarters before GQE II): EFMH
- Literature review GQE I, completed at the same time as GQE II: EES, A/E, SEG, SDC

Students should verify with their thesis advisor in advance which of these two formats for GQE Part I will be used for their particular case, as the choice can sometimes vary within a given program, depending on the student's background and/or choice of thesis topic.

For a coursework-based Part I exam, the committee members will ask questions based on material from a list of approved courses in the student's focal area. Focal areas will be from a standard list provided by the student's program or primary advisor, although the particular field of study may include outside courses as agreed upon by the student's GQE committee. Students should consult with their primary advisor and GQE committee to create the exact list of courses. If Part I is conducted separately from Part II, the duration of Part I should not exceed 90 minutes.

For a literature review Part I exam, the committee members will ask questions based on a 10-page (maximum) literature review submitted by the student. Formatting should be the same as what is required for the Part II exam (see next section). Questions may include coursework concepts relevant to the literature review topic.

GQE Part II: Written Proposal

The primary objective of the written dissertation proposal is for the candidate to demonstrate the relationship between the literature and the proposed research plan. Knowledge of the literature forms the basis for the work that the student proposes for the dissertation.

The written proposal portion of the GQE consists of a document outlining the proposed PhD research. This proposal is then presented either publicly or to the GQE committee in private. The presentation may take up to 30 minutes. If the presentation is public, it is followed by a short public question period lasting approximately 10 minutes. The presentation is followed by questioning from the GQE committee in private, with the total time for Parts I and II not to exceed 180 minutes. If Part II is conducted separately from Part I, the duration of Part II should not exceed 90 minutes (including the presentation and public question period).

The proposal layout is limited to a maximum of 15 pages of text (not including citations) that is similar in format to an NSF-style proposal, sections of which include: (1) introduction and background, (2) literature review (unless already submitted for GQE Part I), (3) proposed work, and (4) timeline. The formatting of the proposal must be as follows:

- Font: 12-point, Times New Roman
- Left-justified with 1-inch margins on all sides
- References format shall be Author-date, i.e. Schmidt (2003) or (Schmidt 2003).
- Figures and tables must include figure/table numbers and captions and the numbers should be referenced in the text. Captions should be centered, with 11-point font.
- Equations must include equation numbers and these numbers must be referenced in the text
- Page numbers included

Although in many cases the candidate will have performed original research leading up to the dissertation proposal, it is not necessary to demonstrate this research in the proposal in

its own section (*i.e.*, a section on “Existing work”). If the student would like to present original research results to date, it should be discussed within the “proposed work” section of the proposal. In cases where the proposed research has already been published (or is awaiting publication), this research can be discussed in the literature review section. Work that has been submitted for publication should be included as an appendix to the proposal (and is not part of the 15-page limit).

Examiners for the GQE

The GQE must be administered by at least three members of the University faculty (members of the Academic Council). A faculty member from the Department of Civil and Environmental Engineering must serve as either the primary advisor or a co-advisor, and must be one of the examiners. Degree programs within the CEE department (SEG, SDC, EES, EFMH, A/E) may have additional committee requirements. Please check with your primary advisor for any specific additional guidelines.

On occasion, the department may approve permission for appointment of one of the three members to be an individual who is not on the Academic Council if that person is particularly well-qualified to consult on the dissertation topic and holds a PhD or foreign equivalent. Such approval must be requested on the [Petition for Non-Academic Council Doctoral Committee Member](#) form. Guidelines for non-Academic Council committee members are listed at the top of this petition. Petitions are not required for former Stanford Academic Council members.

Administering the GQE

The examiners for the GQE will seek to ascertain that:

- The content of the proposed research is relevant to an area of study within CEE
- The reasons for making the investigation are adequate
- The student has developed a suitable strategy for pursuing the subject
- There is originality and there will be a contribution to knowledge

During the GQE, the examiners may recommend adjustments to your proposed program of study, which should be discussed and incorporated into the final version of your application for candidacy (see next section).

Passing the GQE signifies that a student may enter PhD candidacy and continue study toward the PhD degree. The decision of passing or failing will be based upon all relevant information, including performance on the GQE and academic record to date as a PhD student.

Advancing to Candidacy

Students must pass both parts of the GQE in order to advance to candidacy. A decision on the outcome of each part of the GQE will be given immediately after completion of each part. Students who do not pass Part I will not be permitted to proceed to Part II of the GQE.

At the sole discretion of the committee, students who do not pass any part of the exam may be permitted to retake it once. However, both parts of the GQE must be successfully completed before the start of year 3, in accordance with university expectations.

To become an official candidate for a PhD degree, you must also complete and submit the final version of your [Application for Candidacy for Doctoral Degree](#) after passing the department's general qualifying examination (GQE). The proposed program of courses must be typed or clearly printed using supplemental sheets as necessary. List only the 45-units of Post-MS course work. Do not list any of your anticipated thesis units (CEE300/CEE400) on this form. Be certain to indicate on the form the quarter in which you will complete your CEE 200A/B/C teaching requirement. While it may change, an estimated date for completion of the PhD degree should also be given.

Changing your Academic Program

If your actual course work changes after submitting the [Application for Candidacy for Doctoral Degree](#) you must submit to CEE Student Services (Y2E2 316) a revised form approved and signed by your academic advisor. This form is typically submitted only once and it must be at least two weeks prior to either the Preliminary Study List Deadline /First Day of Instruction of your TGR start quarter (which is the university deadline for submitting your request for TGR status form) or your doctoral defense exam date. With approval from your advisor and the Department Chair, the revised list of courses becomes your official program of study for the Doctoral degree.

After obtaining your principal advisor's signature, submit the form to the department's student services office, for the department chairperson's signature.

Extension of Candidacy

If you will be unable to complete the requirements of your PhD degree program of study within five years after admission to candidacy, you must complete an [Application for Extension of Candidacy](#) form. Be sure to review your situation with your advisor as soon as you realize that you will be unable to complete your PhD program within the specified time limits. You must submit this form before your candidacy expires. If you allow your candidacy to expire, your registration privileges will cease and you must apply for reinstatement to continue with your program.

The [Application for Extension of Candidacy](#) form may be used to extend the time limits for completion of your PhD degree program for up to one year. Extensions require a review of your academic progress and approval from the department chairperson.

After completing the form, which includes obtaining your advisor's signature, submit it to the CEE Student Services in Y2E2, Room 316. The chairperson will then sign and CEE Student Services will enter the information in the university system.

Dissertation Reading Committee

A dissertation reading committee consists of three members: your principal dissertation advisor and two additional readers. At least two of the three Reading Committee members must be Stanford Academic Council members. At least one member must be from the Department of Civil and Environmental Engineering. A reader may not be a University Chair for the candidate's oral exam committee.

On occasion, the department may approve permission for appointment of one of the three members who is not on the Academic Council (AC) if that person is particularly well qualified to consult on the dissertation topic and holds a PhD or foreign equivalent. You must request approval by submitting a [Petition for Non-Academic Council Doctoral Committee Member](#) format least two weeks prior to your exam date. Guidelines for non-AC committee members, including the requirement for a CV, are listed at the top of the reading committee form. Petitions are not required for former Stanford Academic Council members. All members of the reading committee must sign the signature pages of the completed dissertation.

As soon as your dissertation reading committee is established, complete a [Doctoral Dissertation Reading Committee](#) form and obtain each reading committee member's signature. Submit the completed, signed form to CEE Student Services office, Y2E2 Room 316. The department chair will then review and sign the form after which CEE Student Services will process it in the university system.

Annual Dissertation Reading Committee Reviews

Upon advancing to candidacy, PhD students must continue to demonstrate satisfactory progress in their PhD research. Progress should be evaluated at least annually by meeting with the members of the dissertation reading committee, either individually or as a group. As the PhD student, you are the person empowered to initiate meetings with your reading committee members, either annually, or more often if desired, in consultation with your advisor.

For annual committee meetings, the recommended format is to give a 30-minute presentation in private to all three members of the reading committee.

Terminal Graduate Registration (TGR)

It is recommended to apply for TGR status as soon as you are eligible, to reduce your tuition payments. To be eligible for TGR status as a Doctoral Degree student you must have:

- Entered Candidacy by passing the department General Qualifying Examination
- Satisfactorily completed all courses on the Application for Candidacy for Doctoral Degree Form; if the program has changed a new candidacy form must be approved by your advisor and submitted to CEE Student Services, Y2E2 316.

- Completed 135 units of residency prior to TGR start quarter and completed residency requirement for all active and completed degree programs
- Submitted the Doctoral Dissertation Reading Committee form to CEE Student Services, Y2E2 316.
- Completed the PhD educational requirements (CEE200; CEE 200A, B or C taken concurrently with TAing a class; the university's TA Orientation offered by CTL; and CEE379)

When you've fulfilled all preliminary requirements, complete a [*Request for TGR Status*](#). Submit this request at least two weeks in advance of the posted deadline for your first quarter as TGR status. After obtaining your principal advisor's signature, email the form to the department's student services office, Y2E2 Room 316.

NOTE: Students with "required" or "strongly recommended" remedial English courses may not include those credits in the 45 degree program specific units on their Application for Candidacy for the Degree of Engineer; however these units may be part of the overall total units

Enrolling in 802

Students with TGR status should enroll in CEE 802 Thesis Project using the section number assigned to their principal advisor and should continue to enroll in CEE 802 every quarter, including the graduation quarter, until conferral of the degree.

Each quarter, your principal advisor will evaluate your thesis work as a measure of continued academic progress, and you will receive a grade of either:

- N *or* S indicating satisfactory progress prior to the final quarter of TGR status and graduation.
- N- indicating unsatisfactory progress prior to the final quarter of TGR status and graduation. In the final quarter of TGR, in order to graduate, a grade of S should be given.

If you receive an N- or I grade for any quarter, you should meet with your advisor and work out a satisfactory plan for completing degree requirements. Subsequent N- or I grades may be grounds for dismissal.

The University Oral Exam

Passing a University Oral Examination is a requirement of the PhD program in the Department of Civil and Environmental Engineering. The Oral Exam is a dissertation defense, presented either upon completion of a substantial portion of the dissertation work or upon completion of a pre-final draft of all dissertation work. The examination is intended to verify that the research represents your own original contribution to knowledge and to test your understanding of the research.

The candidate and the advisor prepare for the examination by identifying a committee chair and four examiners. In most instances, all five members are on the Academic Council (at minimum four of five). If the student will be receiving a PhD minor, one of these members must be from the student's minor department. The participation of a single non-academic council member as an examiner may be approved by the department chair ([*Petition for Non-Academic Council Doctoral Committee Members*](#)) if that person contributes an important area of expertise not readily available from the department faculty.

The chair of a Stanford oral examination is appointed for this examination only, to represent the interests of the university for a fair and rigorous process. The chair must be a member of the Stanford Academic Council and may be a Professor Emeritus. The chair of the examining committee may not have a full or joint appointment in the advisor's or student's department, but may have a courtesy appointment in the department. The chair can be from the same department as any other member(s) of the examination committee and can be from the student's minor department provided that the student's advisor does not have a full or joint appointment in the minor department.

Minimum CEE Faculty Participation

At least two of the four examiners must be CEE faculty members on the Academic Council (that is, assistant, associate or full professors), including the student's advisor or co-advisor in CEE. Including more than a total of 4 examiners will require proportional representation of the CEE faculty.

Other Conditions for the Oral Examination

Candidacy must be valid and the student must be registered in the quarter in which the University Oral Examination is taken. At least two weeks prior to the exam date the candidate must email a [*University Oral Examination*](#) form to CEE Student Services, Y2E2 Room 316. Student Services will provide the exam chair with a folder that includes the exam schedule, a minimum of five ballots, and department and university guidelines for the exam. The student must provide draft copies of the dissertation to members of the examination committee at least one week before the exam or at an agreed upon time between the student and the examination committee.

The examination normally begins with a presentation by the PhD candidate during which clarifying questions may be asked. This part of the examination is typically open to the public. After a brief recess, the examination continues in private session, with only the candidate and members of the examining committee in attendance. The exam may not exceed three hours in length.

Dissertation Submission

To prepare the written dissertation, obtain a hardcopy of [*Preparing Dissertations for Paper Submission*](#), which outlines the University guidelines for preparing a hardpaper PhD

dissertation. To prepare an electronic doctoral dissertation, please visit the following weblink: <https://registrar.stanford.edu/preparing-dissertations-electronic-submission>. If you have questions regarding edissertations, you may email edissertations@lists.stanford.edu or visit the following weblink: <http://studentaffairs.stanford.edu/registrar/students/dissertation-thesis>. When you are ready with a final draft of your dissertation, make an appointment to consult with a Graduate Degree Progress Officer at the Student Services Center at Tresidder Union (Second Floor) to review the completion of your PhD program and the strict formatting requirements for the dissertation.

Submit the final version of your dissertation to the Graduate Degree Progress Officer no later than the posted deadline for your degree to be conferred in the quarter you wish to graduate.

Requests for Deviation

Requests for deviation from the requirements for granting of the PhD degree must be submitted in writing to both your primary advisor and the CEE Department at least one quarter prior to the planned deviation. Deviations must be approved by both your primary advisor and the CEE Department Associate Chair.

PhD Minor

Civil and Environmental Engineering

A PhD minor is a program in another department that complements the student's PhD program. A minor is not a requirement for any degree, but is available when agreed upon by the student and both major and minor departments. The PhD minor is not available to students pursuing graduate degrees other than a PhD.

Each department offering a PhD minor establishes the core, elective and examination requirements for the minor program. The major department determines acceptance of the minor as part of the student's total PhD program. Approval from both the major and the minor departments must appear on the student's [*Application for Candidacy for Doctoral Degree*](#) form. The minor department must be represented on the university oral examination committee.

A student desiring a PhD minor in civil and environmental engineering must have a minor program advisor who is both a CEE faculty member and a member of the Academic Council. The faculty member must be in the program of the designated minor sub-field of CEE. This advisor must be a member of the student's University oral examination committee and on the reading committee for the dissertation.

The minor program must include at least 20 units of 200-level course work (excluding special studies and thesis) in CEE completed at Stanford University. Units taken for the minor cannot be counted as part of the 45 unduplicated units for the PhD major. The list of courses must form a coherent program and must be approved by the minor program advisor and the CEE chairperson. An average GPA of at least 3.0 must be achieved in these courses to obtain the PhD Minor in CEE.