



college of engineering and computing • civil and environmental engineering

GRADUATE STUDENT HANDBOOK

Doctor of Philosophy

(PhD)

Fall 2015

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DOCTORAL (Ph.D.) STUDENT GUIDELINES

Department of Civil and Environmental Engineering (CEE)

University of South Carolina
300 Main Street, Columbia, SC 29208

Doctor of Philosophy (Ph.D.) – 60 credit hours of course work and research beyond the baccalaureate degree.

APOGEE – the degree requirements as well as submission of documents for Ph.D. students are the same as on-campus Ph.D. students. Any differences will be noted throughout this document.

STUDENT NAME: _____

FIRST TERM: _____

ADVISOR: _____

GENERAL

The following guidelines are offered to assist prospective doctoral candidates in pursuing the Ph.D. degree, preparing for their qualifying and comprehensive examinations, and completion and submission of the dissertation. These guidelines are consistent with the requirements imposed by the Graduate School, and they further interpret and explain the position of the faculty in Civil and Environmental Engineering regarding how the specific requirements are to be satisfied. These guidelines are not intended to replace or supersede any requirements stated in the Graduate Studies Bulletin or the CEE Department website. Candidates are urged to familiarize themselves with such requirements and are personally responsible for meeting both requirements set by the Graduate School and the Civil and Environmental Engineering Department.

Graduate School Bulletin: <http://bulletin.sc.edu/index.php>, for guidelines specific to Civil and Environmental Engineering please see “departments/program area” in left (red) column at above mentioned website.

GRADUATE STUDENT RESPONSIBILITY

It is the responsibility of every student to become familiar with the rules and policies in effect at the time the student first enrolls in the graduate studies program. Students should also initiate discussions with their academic advisor regarding scheduling the necessary examinations in accordance with departmental and Graduate School regulations.

DOCTORAL PROGRAM TIMELINE		
Requirement	When to Submit	Check List
Appointment of Advisory/Dissertation Committee* (form GS-48)	First term of enrollment	
Program of Study* (form DPOS)	By end of 4th semester	
Ph.D. Qualifying Exam Verification*	<u>Submit with DPOS.</u>	
Qualifying Exam Evaluation Rubric	This document will be provided to your advisor by the department	
Ph.D. Comprehensive Exam Verification*	60 Days before graduation and final defense (final term)	
Evaluation Rubric Proposal Defense	This document will be provided to your advisor by the department	
Dissertation Defense Announcement Submission	2 Weeks prior to final defend date https://app.gradschool.sc.edu/gms/student/	
Application for Degree* (form AS-126)	For deadline see: http://gradschool.sc.edu/calendar.asp Schedule degree audit with Civil Student Services	
Dissertation Defense Dissertation Signature and Approval* (form G-DSF)	Bring form to your final defense Must be enrolled 1 credit hour minimum for term in which you will defend and graduate	
Evaluation Rubric Doctoral Defense	This document will be provided to your advisor by the department	
Survey of Earned Doctorates* (SED)	On-line survey print confirmation certificate and submit with the G-DSF form in sealed envelope marked Jo Woolley, personal and confidential	
Submission of Dissertation to Grad School	For deadlines see: http://gradschool.sc.edu/calendar.asp (if you miss deadline you do not graduate)	
Student Key Return Office/Lab Cleanup	Completion of defense/Prior to graduation Get form from faculty advisor at final defense	
Graduate Contact Information	Completion of defense/Prior to graduation Get form from faculty advisor at final defense	

*Copies are required to be on file with the CEE student services office.

The Ph.D. student is given 10 years to complete his/her degree.

ADMISSION

Students should have the equivalent of an M.E. or M.S. degree in civil engineering or closely related engineering field. Exceptional students may be eligible to enter directly into the Ph.D. degree program with a B.S. degree in civil engineering or closely related engineering field. Applicants must exceed the minimum grade and test score requirements for admission to the Master's degree programs (refer to the M.S. and M.E. eligibility requirements: http://sc.edu/study/colleges_schools/engineering_and_computing/study/areas_of_study/civil_and_environmental_engineering/degree_programs/phd-degree.php). Outstanding students with non-engineering baccalaureate degrees may qualify for admission to the Ph.D. degree program, with the understanding that they must complete specified deficiency/prerequisite courses.

IMMUNIZATION

University policy requires all students complete and submit records of immunization before registering for classes. The necessary forms with instructions can be found here: <http://www.sa.sc.edu/shs/files/2014/12/Immunization-Form-Electronic-Version-11-2014.pdf>.

APOGEE students fall under Section D on the immunization form. Mail or fax forms to: University of South Carolina, Thomas Student Health Center, Immunization Clinic, 1409 Devine Street, Columbia, SC 29208. FAX: (803) 777-3955.

HEALTH INSURANCE

<http://www.sa.sc.edu/shs/billing/insurance/>

All graduate students enrolled in nine or more credit hours, graduate assistants, and international students are required by the University to have health insurance and must either:

- Purchase the University-sponsored Student Health Insurance Plan through AIG

-- OR --

- Waive out by providing documentation of enrollment in a comparable health insurance plan that meets the waive out requirements detailed below.

Waive out by submitting the online waiver certifying they have and will maintain adequate and acceptable insurance coverage during the current academic year. CEE Information: See website above (<http://www.sa.sc.edu/shs/billing/insurance/>) for deadline to waive out of USC insurance and additional information on this process. The form must be submitted each semester you wish to waive USC mandatory insurance. Also see website above for deadline to waive.

APOGEE students should not be automatically enrolled in USC's Health Insurance. If this charge appears on your tuition bill, please contact the Thomas Student Health Center directly, (803) 777-1916.

FINANCIAL AID

The department provides financial aid in the form of research and teaching/instructional assistantships to a limited number of qualified graduate students. Students indicating on their applications that they wish to be considered for assistantships or fellowships will automatically be considered for any available positions in the Department of Civil and Environmental Engineering. Students receiving assistantships must be enrolled as full-time students. Assistantships are renewable on a semester basis, but may be terminated at any time if a student fails to perform satisfactorily in his/her coursework and research or teaching assignments or fails to maintain minimum academic standards. The Department of Civil and Environmental Engineering only awards research and teaching/instructional assistantships to M.S. and Ph.D. students.

APOGEE students do not qualify for financial aid.

Students receiving departmental teaching/instructional assistantships are expected to teach laboratories, grade papers, or perform other functions related to instructional activities. Teaching assistants are required to attend a two-day Instructional Development Project (IDP) workshop conducted by the Graduate School in mid-August. International students must also attend an earlier, two-day workshop. A student must be certified by the Graduate School prior to receiving a teaching/instructional assistantship.

Research assistantships are available via individual faculty research projects. Students desiring research assistantships are advised to contact faculty directly. Assistantship recipients receive stipends that range from \$1200 to \$7500 in addition to tuition supplements each semester. Tuition supplements may/may not cover the cost of Health Insurance and first semester matriculation fees associated with the graduate school and international office. Tuition and academic fees are published at <http://www.sc.edu/bursar/>.

Students should consult the Fellowships & Awards section of the Graduate School website, <http://gradschool.sc.edu>, for information on non-departmental fellowships. For other sources of financial support please visit Financial Aid and Scholarships: <http://www.sc.edu/financialaid/>.

International students must provide evidence of financial resources sufficient to cover the expense of one year of study, including tuition, room, and board. This information must be submitted to the International Programs for Students Office prior to issuance of an I-20 or IAP-66 document. Visit the IPS website for more information: <http://www.ip.sc.edu/>.

GA/TA TRAINING

All Ph.D. students who will serve as Instructional Assistants (IA) or Teaching Assistants (TA) are required to participate in the GA/TA training to become certified to teach. This training is offered through The Graduate School each August – students will enroll in GRAD 800 for certification. All information pertinent to this training will be sent via email from The Graduate School after the student has enrolled. Requirements for teaching certification must be completed in the first year of the program. In addition to GA/TA training, International students will also be required to complete two days of *International Teaching Assistant* workshop with the *English Programs for Internationals* office. Students must pass both workshops to be certified to teach.

LAB SAFETY TRAINING

<http://www.sc.edu/ehs/LabSafety/Labtraining.htm>

Laboratory Safety training is **required** for all laboratory workers. All personnel on the Columbia campus or School of Medicine must attend one live training session. Please see link below for schedule. Area campus personnel must satisfy the requirement by watching the breeze presentation and completing the quiz. A certificate will be available for printing if 80% of the questions are answered correctly.

CEE Department requirement: upon successful completion of Lab Safety Training, a copy of the certificate **MUST** be provided to our Lab Manager, Mr. Russell Inglett. An update on this training, and certification, is required prior to the fall semester each year. Failure to comply with this requirement may result in termination of your Graduate Research Assistantship.

USC HONOR CODE

Students are expected to abide by the USC Honor code (<http://www.sc.edu/policies/staf625.pdf>). You are expected to practice the highest possible standards of academic integrity. Violations of the University's Honor Code include, but are not limited to **improper citation of sources, using another student's work, and any other form of academic misrepresentation**. Cheating will not be tolerated. Plagiarism will not be tolerated. For more information, see the **Carolina Community** (<http://www.sa.sc.edu/carolinacommunity/index>) Student Handbook.

PLAGIARISM

Students are responsible for understanding and avoiding plagiarism. Plagiarism is a form of representing someone else's work as if it were your own. Inadvertent plagiarism is still plagiarism. For more information about avoiding plagiarism and properly citing or acknowledging other's work, please see the following:

- Purdue University (<http://owl.english.purdue.edu/owl/resource/589/01/>)
- Indiana University (<http://www.indiana.edu/~wts/pamphlets/plagiarism.shtml>)
- Northwestern University (<http://www.northwestern.edu/uacc/plagiar.html>)
- University of South Carolina School of Law (<http://professionalism.law.sc.edu/docs/plagiarism.pdf>)
- University of North Carolina (<http://www.unc.edu/depts/wcweb/handouts/plagiarism.html>)
- Princeton University (<http://www.princeton.edu/pr/pub/integrity/08/plagiarism/>)

Note: Both cheating and plagiarism can be grounds for termination of student enrollment, degree and assistantship, and may result in expulsion from USC.

COPYRIGHT INFRINGEMENT

The University of South Carolina is committed to upholding the U.S. Copyright Law and through the Policy on Network Access and Acceptable Use, specifically prohibits violation of the U.S. Copyright Law. This includes unauthorized distribution of copyrighted material as well as downloading, using, or installing pirated music, movies, games, and/or computer software on the College of Engineering and Computing computers and network (including personal computers connected to our network through USC wireless or college VPN). Violation of copyright law will not be tolerated and will be dealt with per USC policies and procedures: <http://www.sc.edu/copyright/infringement.shtml>.

Additionally, employees and students working for research groups discovered engaging in piracy or any theft of any intellectual property may be subject to harsher penalties by their home department or the college. For more information on Copyright @ USC please see: <http://www.sc.edu/copyright/>.

ACADEMIC STANDARD FOR GRADE POINT AVERAGE

The cumulative grade point average (GPA) is defined as the GPA of all graduate credit courses recorded on the official USC transcript. In-date courses are 10 or less years old for doctoral students. Revalidated courses are also included in the cumulative GPA calculation. Grades earned for graduate credits transferred from other colleges or universities are not included in the cumulative GPA.

ACADEMIC STANDARD FOR PROGRESSION

Graduate courses may be passed for degree credit with a grade as low as C, but a degree-seeking student must maintain at least a B (3.00 on a 4.00 scale) cumulative grade point average. Programs may cancel a student's registration privilege if the student fails to make adequate progress toward degree as defined by the program's academic policies. A student's registration privileges may also be cancelled for failure to meet academic standards as defined by The Graduate School.

ACADEMIC STANDARD FOR GRADUATION

At the time of graduation, the student's graduate cumulative grade point average (GPA) must be at least 3.00 (B) on a 4.00 scale. Additionally, the student's average on all grades recorded on the program of study for courses numbered 700 or above must be at least 3.00 and all courses listed on the program of study must be at least 3.00.

ACADEMIC SUSPENSION POLICY

Graduate degree-seeking students whose cumulative grade point average (GPA) drops below 3.00 (B) will be placed on academic probation by The Graduate School and allowed one calendar year in which to raise the cumulative GPA to at least 3.00. In the case of conversion of grades of incomplete that cause a cumulative GPA to drop below 3.00, a degree-seeking student will be placed on academic probation at the end of the semester in which the grade is posted. Students whose cumulative GPA falls below the required minimum of 3.00 by receiving a grade for a course in which they received a grade of Incomplete will, instead of a one-year probationary period, be granted only one major semester of probation dating from the semester in which the Incomplete conversion grade is received by the registrar in which to raise their cumulative GPA to 3.00 or above. Students who do not reach a cumulative 3.00 grade point average during the probationary period will be suspended from graduate study and will not be permitted to enroll for further graduate course work as a degree or a non-degree student.

Civil and Environmental Engineering Ph.D. students must maintain a 3.0 average on coursework required for the degree program. They must also perform research and other duties related to their area in accordance with and assigned by their faculty advisor. Students' performance in the

program is evaluated each semester, failure to meet the requirements and perform research can result in termination of the assistantship and/or termination from the Civil and Environmental Engineering Doctoral program.

ADVISEMENT

Each graduate student is assigned to a faculty advisor upon enrollment. **Graduate students MUST be advised during the scheduled advisement as set by the registrars office.**

It is the student's responsibility to contact his or her faculty advisor to schedule an advisement time before the registration date each semester. Graduate students are assigned a pre-registration date and time for when they register for advised courses. The date and time to register each semester is viewable via the student's my.sc.edu account or Self Service Carolina (SSC). Advisement for summer and fall registration is in the spring; advisement for spring registration is in the fall.

The Registrar's office sets the advisement schedule which is approximately two weeks after the spring and fall breaks and lasts for two full weeks. Students receiving departmental funding as research or teaching assistants must be registered to receive financial support and thus must register during pre-registration. Please refer to the Registrar's website for information regarding advisement and registration times (<http://www.registrar.sc.edu>).

Prior to registering for a second semester at USC, please review The Graduate School admission letter for any conditions placed on your admission. All conditions must be met to be able to register a second term.

APOGEE students are encouraged to meet with their faculty advisors when possible. If commuting distance does not allow, students may communicate via email and phone. The advisement form for APOGEE students can be found: [needs reposting](#) . Complete the form and submit via fax or e-mail for advisor signature. The student will be notified via email when his or her advisement hold has been lifted. All courses offered via video streaming in the College of Engineering and Computing are indicated by section 006 and above. Non-APOGEE students are restricted from enrolling in and having access to video streaming.

ENROLLMENT

A graduate student may enroll for a term load not to exceed 15 graduate hours. A student with a term course load of 9 or more hours during a fall or spring term is classified as full-time for academic purposes. The maximum course load in each of the two summer sessions is 6 hours. May session enrollment is part of the 6-hour limit for Summer 1 term.

Graduate students (US and International) receiving an assistantship and/or full tuition from the CEE Department are required by the CEE Department to be enrolled as follows:

<u>Semester</u>	<u>Number of Credit Hours</u>
Spring	9 credit hours
May session/Summer I	1 credit hour
Summer II	1 credit hour
<i>(Or total of 2 credit hours in either Summer I or II, or enrollment in a 3 credit hour course beginning summer I and ending summer II)</i>	
Fall	9 credit hours

Exceptions to this policy need to be discussed with your faculty advisor and approved by the Department Chair.

All Ph.D. students (including APOGEE) must be enrolled for at least 1 credit during any semester in which dissertation progress is made and such University resources as the library, computer facilities, or faculty time are used. **Students MUST be enrolled for 1 credit (minimum) in the semester they defend and apply to graduate. No exceptions – this is part of the graduation audit process.**

The Dean of The Graduate School, under certain circumstances, may certify that a student's full time enrollment is less than the normal requirement of 9 hours for graduate students (6 hours for students serving as graduate assistants). This is known as special enrollment (formerly Z-Status). Students seeking an exception to minimum enrollment requirements should submit the special enrollment, GA under enrolled (GS-ZS) (<http://gradschool.sc.edu/forms/>) form to the Graduate School prior to registering for classes. International students (only) must also submit the approved *Exemption from Full-time Enrollment form* from International Programs for Students. These forms are submitted at time of advisement/registration for effective term of under enrollment. APOGEE students do not need to submit these forms.

Students nearing completion of a Ph.D. degree requiring a dissertation defense may be granted special enrollment status and certified as half-time or full-time if the student has completed course work required for the degree except dissertation preparation (ECIV 899). Eligibility requires verification by the student's academic advisor or program graduate director that:

- All course work on the program of study has been completed except for dissertation preparation (899);
- The student is working on the dissertation full- or at least half-time; and
- The student is not employed more than half-time excluding graduate assistantships.

Students who request exemption from full-time enrollment for financial aid purposes must submit the Special Academic Enrollment Release form (F 6.2) available from the Office of Financial Aid.

CONCURRENT ENROLLMENT

Ph.D. students are allowed an opportunity to earn both M.S. and Ph.D. degrees through concurrent enrollment. Students must consult with their faculty advisor and submit a concurrent enrollment form to the department Student Services Administrator. Application and transcripts will be reviewed by faculty in their area of interest: *Environmental, Geotechnical, Structures, Transportation or Water Resources* to determine eligibility. If admitted, concurrently enrolled students are allowed 10 years to complete both degrees.

DEGREE REQUIREMENTS

The requirements for the Ph.D. degree in Civil and Environmental Engineering conform to the regulations of the Graduate School. The student is responsible for satisfying both departmental and The Graduate School requirements.

Completion of the doctoral degree requires a minimum of 60 credits beyond the B.S. degree. Degree requirements should be achieved within an 8 year time frame. Revalidation of courses will be necessary after the 10 year period.

Students having earned an M.S. or M.E. degree must complete a minimum of 30 credits beyond the Masters degree, of which 12 credits must be Dissertation Preparation (ECIV 899).

- For students pursuing a Ph.D. degree in the same program area (environmental, geotechnical, structural, transportation or water resources engineering) as their M.S. or M.E. degree, a minimum of 18 credit hours of course work is required. Core-Courses may be satisfied during the M.S. or M.E. degree. At least 9 of the 18 hours of course work must be completed at the 700-level or above. At least 9 of the 18 hours of course work must be completed within the department.
- For students pursuing a Ph.D. degree in a different program area from their M.S. or M.E. degree, a minimum of 24 credit hours of course work in the new area is required. Core-Courses must be satisfied in the new area. At least 12 of the 24 hours of course work must be completed at the 700-level or above. At least 15 of the 24 hours of course work must be completed within the department.
- Outstanding students entering the doctoral program directly from the B.S. degree must complete 12 credits of Dissertation Preparation (ECIV 899) and 48 hours of course work. At least 30 of the 48 hours of coursework must be completed at the 700-level or above. At least 30 of the 48 hours of coursework must be completed within the department. Prescribed Core-Courses are required for each area of study.

A maximum of 6 credits of ECIV 797 can be used toward the student's program of study beyond the baccalaureate degree.

In addition to the above requirements, all students are required to attend the Civil and Environmental Engineering Seminar (ECIV 798) in each semester in which they are full-time students. Full-time is defined as those on an assistantship and/or enrolled in 9 or more credit hours. APOGEE students are exempt. Students approved for special enrollment and on an assistantship are not exempt from ECIV 798.

The residency requirement for the Ph.D. degree ensures that students benefit from and contribute to the complete spectrum of educational and professional opportunities provided by the graduate faculty of a comprehensive university. The granting of a doctoral degree presupposes a minimum of three full years of graduate study following admission to the doctoral program. As such, the residency requirement may be fulfilled by enrollment in at least 18 graduate credit hours within a span of three consecutive semesters (excluding summers). Enrollment in a summer term (for residency requirements) is not required to maintain continuity, but credits earned during summer terms may be used to count toward residency. Enrollment through the APOGEE program does not satisfy the residency requirement for the Ph.D. degree. If the student has completed all required coursework, ECIV 899, (dissertation preparation), may be used to fulfill the residency requirements.

Ph.D. students must maintain a 3.0 average on coursework required for the degree program. They must also perform research and other duties related to their area in accordance with and assigned by their faculty advisor. Students' performance in the program is evaluated each semester, failure to meet the requirements and expected research performance can result in termination of the assistantship and/or termination from the Civil and Environmental Engineering Doctoral program.

In special circumstances, students may petition to waive a CEE course requirement. Petitions should be submitted by the student for approval by his/her academic advisor and the Graduate Program Committee. The petition must explain how the requested change has a significant connection to the student's research and academic degree.

ENROLLMENT IN COURSES OUTSIDE MAJOR AREA

Students wishing to enroll in courses outside the area to which they have been admitted should do so only with the permission of their academic advisor and should consult the department offering the course regarding eligibility and prerequisites. An individual who has been declined admission to a program may not continue to enroll in or audit courses in that area without special permission of that department even if the student has subsequently been admitted to another program.

TRANSFER OF COURSE CREDIT

Course work not part of a completed certificate program or graduate degree from USC or another institution may be transferred for credit toward a Doctoral degree. Course work transferred from another institution must be relevant to the program and have course content and a level of instruction equivalent to that offered by the University's own graduate programs. Approval for acceptance of transfer credit to a student's program of study must be approved and justified by the student's academic program and submitted to the dean of The Graduate School for final approval on the *Request for Transfer of Academic Credit (G-RTC) form*.

Only credits with grades of B or better may be transferred from another institution into a Doctoral program. Course work transferred for credit toward a Doctoral degree must be from an accredited institution and must be no more than 10 years old at the time of graduation. Transfer credit is not posted to the student's official academic transcript until the term of graduation.

Up to 9 credit hours may be accepted for transfer in the Department of Civil and Environmental Engineering.

EXAMINATIONS

The doctoral examination consists of two parts. The first part, the Qualifying Examination, is comprised of a written and oral examination on the fundamentals of Civil Engineering pertinent to the candidate's respective Program Area: Environmental, Geotechnical, Structural, Transportation or Water Resources Engineering. The second part, the Comprehensive Examination is an examination of the candidate's detailed research program.

Scope of the Examinations

The faculty is charged by the Graduate School with the responsibility of verifying the competency of students to successfully pursue a program of advanced research. The purposes of the examinations are (a) to encourage candidates to assemble, reexamine, and put into perspective the subject matter of their previous education, (b) to evaluate the maturity, resourcefulness, and self-confidence of the candidates, (c) to establish the limits of their technical knowledge and competence, (d) to identify weaknesses and provide opportunities for strengthening them, and (e) to assess the candidate's ability to complete a doctoral dissertation in a reasonable period of time.

1. Qualifying Examination

The Qualifying Examination is comprised of a written and an oral examination. The candidate should be well versed in the fundamentals of Civil Engineering pertinent to the candidate's respective Program Area: Environmental, Geotechnical, Structural, Transportation or Water Resources Engineering. At least one month prior to the scheduled Qualifying examination, the candidate should approach the members on his/her committee to discuss the scope of the examination material. A person becomes a candidate for the Ph.D. degree upon successful completion of the Qualifying Examination.

2. Comprehensive Examination

The Written and Oral Comprehensive Examination tests the student's comprehension and depth in the field for which he/she is pursuing research. The exam will consist of a detailed research plan that will lead to an acceptable doctoral dissertation. The candidate will document the research plan in written form and deliver an oral presentation of the research plan to his/her committee. The purpose of this portion of the examination is to evaluate the candidate's ability to select a meaningful research topic, objectively state the problem, and propose a plan of investigation that can reasonably be expected to lead to a dissertation. The candidate should be well versed in all areas relating to the proposed dissertation topic.

The proposal should include a literature review, an exact statement of the problem, hypothesized results, specific tasks to be completed, and a budget of time. It is fully recognized that many changes may take place between presentation of the proposal and the final dissertation. However, the research proposal should have some specific objectives and a rational plan to attain them.

Certification of the comprehensive examination for doctoral students remains valid for five years from the academic term taken, after which it must be revalidated.

Examination Outcome

The outcome of the Qualifying Examination must be PASS for Admission to Candidacy to be granted. An outcome of FAIL results in termination of the candidate's degree program. The candidate must PASS the Comprehensive Exam to satisfy the requirements of the doctorate and defend his/her dissertation. The "Evaluation Rubric: Qualifying Exam" must be completed by each committee member following the Qualifying Exam.

After successful completion of the Qualifying Examination, the "Qualifying Exam Verification" form must be signed by all committee members and the graduate director and be filed with the Department. Similarly, after successful completion of the Comprehensive Examination, the "Comprehensive Exam Verification" form must be signed by all committee members and the Graduate Director and be filed with the Department. Both forms are **degree audit documents** and must be submitted to The Graduate School.

The “Evaluation Rubric: Proposal Defense” must be completed by each committee member following the Comprehensive Exam and be filed with the Department.

Time of Examinations

1. Qualifying Examination

The Qualifying Examination is taken when the candidate has completed the required core courses in the candidate’s Program Area. Normally, this will occur after the first year of study. The exams will be administered once or twice a year, usually at the beginning of a semester. The written portion of the exam will be administered first followed by the oral portion. The two exams are usually administered on different days. Students should consult with their academic advisors regarding the time of examination administration for a given year.

2. Comprehensive Examination

The Comprehensive Examination is administered after the completion of all courses listed on the student’s Program of Study, or during the final term in which the remaining courses are to be completed. It should be taken as soon as possible after the Qualifying Examination, and must be presented at least 60 days prior to the award of the degree. The written proposal should be submitted to the candidate’s advisor at least one month before the examination and to the committee at least one week prior to the examination. The written proposal should be approved by the candidate’s research advisor before being submitted to the committee. The candidate is responsible for scheduling the date of the comprehensive examination in consultation with his or her research advisor.

APOGEE Students: Due to the nature of these examinations you will need to plan to be on-campus in Columbia for the Qualifying Exam (written and oral parts), the Comprehensive Exam and the Final Dissertation Defense.

PROGRAM OF STUDY

The candidate’s Program of Study (Form DPOS) lists the coursework to be taken to meet the degree requirements. Coursework must be focused in the candidate’s respective Program Area: Environmental, Geotechnical, Structural, Transportation or Water Resources Engineering and must include the required core courses* in the selected Program Area. The Program of Study must list all required credit hours beyond the baccalaureate. The Program of Study should not list any courses that are not required for the degree. If an M.S. or M.E. degree was obtained prior to the Ph.D. degree, credit hours completed for the M.S. or M.E. degree must be listed first (30 credit hour equivalent).

The Program of Study Form must be completed after the candidate passes the Qualifying Examination and forms the Advisory Committee. It must be filed with the Graduate School no later than 2 years after the candidate is fully admitted. The DPOS is a **degree audit document**. A foreign language is not required by the Civil and Environmental Engineering Department.

*A copy of the core courses is attached. Please visit:

http://sc.edu/study/colleges_schools/engineering_and_computing/study/areas_of_study/civil_and_environmental_engineering/degree_programs/core_courses.php for an up-to-date listing

ADMISSION TO DOCTORAL CANDIDACY

Upon nomination from the doctoral program, the Dean of The Graduate School considers students for admission to doctoral candidacy only after the student is fully *admitted to the doctoral degree program* by the academic unit, *passes the qualifying examination*, and *submits an approved doctoral program of study* to the dean of The Graduate School. No student is admitted to candidacy by the dean of The Graduate School until after completion of all three conditions and written nomination is received from the academic program. The Graduate School will notify the student and the graduate director of the student's program when the student has been admitted to candidacy.

Note: admission to candidacy must be granted at least one full academic year before the awarding of the degree.

DOCTORAL PROGRAM COMMITTEES

Each doctoral student will have three academic committees during the course of doctoral study, *the Advisory Committee, the Written and Oral Comprehensive Examination Committee, and the Dissertation and Dissertation Defense Committee*. Each of the three committees has an assigned function and must conform to policies of The Graduate School on doctoral committee membership. Membership on doctoral committees, excluding the outside member, is limited to regular members of the graduate faculty and those who hold special term appointments with approval to serve as a regular member of a doctoral committee. **Each doctoral committee must have no more than one outside member.** The three committees may or may not have the same members. The committee appointment request form (GS-48) is a **degree audit document**.

The outside member may be a regular member of the graduate faculty in another department/program at USC, a faculty member from another institution, or a qualified professional from the private or governmental sectors. The outside member is nominated by the academic unit to the dean of The Graduate School. Approval is based on the nominee's qualifications provided on a resume or curriculum vitae and relevance to the student's major field or research as explained in the justification submitted by the graduate director of the program with the nomination. Outside members do not need to have term appointments to serve on the committee.

1. Advisory Committee

The Advisory Committee is appointed by the program by the end of the first term of enrollment and should include two or three faculty from the student's academic program. This purpose of the Advisory Committee is to provide initial advisement of the student, guide academic planning and research efforts, and construct the program of study to file with The Graduate School. Often the Advisory Committee also oversees the qualifying examination. The graduate director of the program notifies the dean of The Graduate School when the student has passed the qualifying examination, has been fully admitted to the doctoral program, has an approved doctoral program of study on file, and has been nominated to doctoral candidacy by the program. The Advisory Committee roster does not need to be submitted to the dean of The Graduate School for approval.

2. Written and Oral Comprehensive Examination Committee

The Written and Oral Comprehensive Examination Committee administers the oral and written portions of the comprehensive examination. The committee for the comprehensive examination must include no fewer than four members, at least one of

whom must be from outside the student's program. The roster of the Written and Oral Comprehensive Examination Committee is submitted to the dean of The Graduate School for approval on the Doctoral Committee Appointment Request (GS-48) form. The graduate director of the program provides written notification to the dean of The Graduate School that the student has passed the comprehensive examination.

3. Dissertation and Dissertation Defense Committee

The Dissertation and Dissertation Defense Committee directs the research and preparation of the student's dissertation, examines the student on the content of the dissertation, directs the student to complete documents required for graduation, and signs forms required for graduation. The Dissertation and Dissertation Defense Committee requires no fewer than four members, at least one of whom must be from outside the student's program. The chair of the Dissertation and Dissertation Defense Committee must be a regular member of the graduate faculty. The roster of the Dissertation and Dissertation Defense Committee is submitted to the dean of The Graduate School for approval on the Doctoral Committee Appointment Request (GS-48) form.

The GS-48 form (for advisory/dissertation committee) is a **degree audit document**.

PUBLICATIONS

A doctoral candidate must demonstrate the ability to conduct research and publish the findings in peer reviewed journals, conference proceedings and other works. At least 2-3 journal papers are expected from the body of work in the Ph.D. dissertation.

DISSERTATION

Students enrolled in a doctoral degree program are required to submit an approved dissertation to satisfy part of the requirements for the degree. The dissertation is the ultimate requirement of the doctoral program and becomes a permanent record of the student's independent research or creative effort. The best academic tradition and professional practice require The Graduate School to preserve and share graduate student work with other scholars. To do that successfully means maintaining high standards concerning the form and appearance of the dissertation. The dissertation is based on original research and is completed under the direction of the Dissertation and Dissertation Defense Committee. Dissertation formatting and organization guidelines are available on the website of The Graduate School. No later than five years after passing the comprehensive examination, the student must present a dissertation that has been approved by the student's Dissertation and Dissertation Defense Committee.

Courses numbered 899 in all departments are restricted to dissertation preparation. All doctoral candidates are required to successfully complete a minimum of 12 hours of dissertation preparation (899), but up to 30 hours of dissertation preparation (899) or 30 hours of a combination of dissertation (899) and thesis (799) preparation are allowed on a doctoral program of study. With permission of the student's academic advisor and program graduate director, dissertation preparation hours (899) may be taken in any department if pertinent to the student's research. Any student who uses University facilities or confers with faculty on dissertation work in any semester must be officially enrolled for at least one hour of dissertation preparation (899) credit.

On the student's academic transcript completion or satisfactory progress in dissertation preparation will be indicated by the grade of T; unsatisfactory progress in dissertation preparation will be indicated by the grade of U. These grades will not be used to calculate the student's grade point average. Programs may establish policies regarding progress to degree and eligibility for continued enrollment that are more stringent than the policies of The Graduate School.

DISSERTATION DEFENSE

A dissertation must be successfully defended before the Dissertation and Dissertation Defense Committee. **The dissertation defense should be no fewer than 30 days before the date of graduation.**

Please consult the graduate director of the academic program for departmental, school, or college specific defense requirements, including scheduling procedures. The Graduate School requires that the dissertation defense be publicly announced. **The Dissertation Defense Announcement must be submitted at least 14 days prior to the defense.** (<https://app.gradschool.sc.edu/gms/student/>). Students are also responsible for sending, via email, to the Student Services Administrator within the department an announcement with date, time, location, title of dissertation and a brief abstract. This announcement will be sent to faculty and students as an invitation to attend the defense.

When the defense has been approved by the Dissertation and Dissertation Defense Committee, the signatures of the committee members must be obtained on the Dissertation Signature and Approval (G-DSF) form. (It is the responsibility of the student to bring this form to the dissertation defense and obtain committee signatures). The electronic submission of the dissertation will not have title page signatures; this is to prevent theft and unauthorized use of signatures that otherwise might occur. The graduate director of the academic program will also be asked to sign the G-DSF form to affirm that the dissertation follows The Chicago Manual of Style or another style manual endorsed by the program.

In addition, the student must complete the Survey of Earned Doctorates (SED) available on the website of The Graduate School. The G-DSF with signatures and the SED must be delivered to The Graduate School program coordinator who oversees the degree program. The G-DSF is to be submitted to the program coordinator in an envelope marked "Personal and Confidential." The student may hand-deliver the completed SED and G-DSF to The Graduate School program coordinator or may send it through the mail.

The G-DSF and SED must be received by the final submission deadline in order for the student to be cleared for graduation. They are both degree audit documents. Please provide a copy of both documents to Civil Student Services for record purposes.

It is the responsibility of the student to secure the location for the Doctoral Defense. The Defense is typically held in the CEE Department Large Conference Room. See C230 or C229 to inquire about room availability.

Doctoral candidates should be registered for at least one semester hour of dissertation preparation credit (ECIV 899) in any term in which University facilities are used or faculty consulted on the preparation of the dissertation, including the term in which the dissertation is completed and defended. If you are not enrolled the term you defend – you will not be cleared to graduate.

DISSERTATION FORMATTING and SUBMISSION WORKSHOP

The Graduate School offers Electronic Thesis and Dissertation Formatting and Submission workshops each semester, excluding summer sessions. These are not mandatory but you are **STRONGLY** urged/advised to participate. These workshops will contain important information regarding formatting your dissertation for submission. By getting the formatting requirements sorted out early, you will save yourself time and stress as deadlines approach. The workshop is the perfect time to ask questions about formatting requirements or submission process. Each scheduled seminar will cover the same material and participation is first come, first serve but you must register. For more information contact the workshop coordinator, Zach Lukemire, lukemire@mailbox.sc.edu.

DISSERTATION SUBMISSION

See Graduate School website for more information on submission and direct links to forms: <http://gradschool.sc.edu/students/thesisdiss.asp?page=acad&sub=etd>

No paper copies of the dissertation are required by the Graduate School. If the academic program requires students to submit a bound copy of the dissertation, the department and student are responsible for obtaining the copy. The website of The Graduate School provides several options for dissertation binding.

APPLICATION FOR GRADUATION AND DEGREE AUDIT

All students enrolled in a doctoral degree program must file the application for degree/graduation available on the website of the Office of the University Registrar with The Graduate School within the first 15 class days of the fall or spring semester in which the degree is to be awarded, or within the first 10 class days of Summer Session I if the degree is to be awarded at the end of the summer (even if the student does not plan to take courses until the second summer session). Although some departments do not require students to provide the academic program with copies of the application for graduation, **The Graduate School recommends that Students do provide a copy to the academic program to facilitate assessment of degree requirements.** Applicants are encouraged to consult with the academic program to confirm that all requirements for graduation have been met.

Applications for graduation submitted after the announced filing deadline will be accepted if supported by a letter from the graduate director of the student's program. Deadlines are posted for each term on the official academic calendar of the University found on the website of the Office of the University Registrar. Any late application that lacks the supporting letter or late fee will be processed for the following term.

The Graduate School forwards the Application for Graduation form to the Office of the University Registrar to start the degree audit process. In my.sc.edu, students should view their Graduation Degree Application to confirm the accuracy of the information submitted and to correct any errors so the diploma is printed correctly. It is also important to inspect the my.sc.edu graduation degree application information to determine if there are any holds that will prevent issue of an official transcript or mailing of the diploma. At the end of the semester, the

degree program and The Graduate School both assess for degree audit whether all requirements have been completed, and then forward a recommendation to the Registrar to approve or disapprove award of the degree.

At the time of graduation, the student's cumulative grade point average (GPA) must be at least 3.00. Additionally, the student's average on all grades recorded on the program of study for courses numbered 700 or above must be at least 3.00 and all courses listed on the program of study must be at least 3.00.

DEGREE CONFERRAL

Upon confirmation of a clear degree audit, the degree will be posted by the Office of the University Registrar to the student's official academic record. The degree award is posted to the student's transcript within 6 weeks after the commencement ceremony. Degree candidates may wish to check periodically to see if the degree is posted. Diplomas will be mailed to the address recorded on the application for graduation via first class mail to U.S. addresses and via registered airmail to international addresses. Graduates may expect to receive the diploma within three months after the commencement exercises. **Note: degrees cannot be awarded retroactively.**

To pursue further graduate study after completion of a graduate degree, a student must submit a new application to The Graduate School.

ACADEMIC REGALIA AND COMMENCEMENT INFORMATION

Visit: <http://commencement.sc.edu/> for more information on graduation.

STUDENT KEY RETURN

Please return all keys issued during your studies and the completed key return form to C230 or C229. There is a \$25.00 per key fee for any keys not returned to the CEE Department. Key return form is available in C230/C229 and on the department website.

CLEAN UP

All students are required to clean out assigned work space (office and lab) of all personal research and course related materials prior to turning in keys and graduating. All borrowed items should be returned to the owner(s). Any unused office supplies (including empty 3 ring binders) are to be returned to the supply closet. Materials in the labs related to your research should be approved by your faculty advisor prior to disposal.

Note: a department block will be placed on your graduation if keys are not returned and office and lab space have not been cleared.

GRADUATE CONTACT INFORMATION

Please take the time to complete the Graduate Contact Information form, available on department website, so that we may keep in touch with you. If the home address changes or career moves

you to a different company please don't forget to let us know. Send Karen Ammarell an email: ammarell@cec.sc.edu to update your contact information.

ATTACHMENTS

- Things to Know
- Program Area Core Courses
- Department Faculty Phone List
- Computer purchasing/needs information, provided by CEE IT Support.
- CEE Lab Safety and Procedures Manual – *Note signature requirements on form*

The information provided in this document was compiled Summer 2010/updated Fall 2011/Fall 2013/Fall 2015. Students should refer to the graduate school and department websites for inclusive up-to-date information. Most important: degree requirements, thesis submission process, core course listing and submission time lines.

IMPORTANT WEBSITES:

- Graduate School: www.gradschool.sc.edu
- Engineering: http://sc.edu/study/colleges_schools/engineering_and_computing/index.php
- International Program: <http://www.ip.sc.edu>
- Registrar: <http://registrar.sc.edu/>
- Bursar: <http://sc.edu/bursar/>
- Thomas Student Health Center (Insurance): <http://www.sa.sc.edu/shs/billing/insurance/>

APOGEE students will receive login information with userid and password to access video streaming prior to the start of each semester via email as listed on the graduate application or to @email account. If you do not receive this information please contact the department student services office, (803) 777-9482. Any login and/or streaming problems please report via email to UISstrm@mailbox.sc.edu.

Things to Know

Lab Safety – All graduate students must complete an online safety course. It takes approximately 30 minutes and is followed by an online quiz/assessment. A certificate will be available for printing if 80% of the questions are answered correctly. Please visit: <http://www.sc.edu/ehs/LabSafety/Labtraining.htm> to begin the process. A copy of the certificate **MUST** be provided to Russell Inglet, Research Specialist. Deadline to submit certificate of completion is September 15 and must be renewed annually. Failure to update could result in termination of your assistantship.

Advisement

- Advisement forms are available in C218, 300 Main for on campus students. APOGEE students must submit an APOGEE advisement form – please email ammarell@cec.sc.edu to request a copy.
- Advisement is scheduled for two weeks immediately after fall and spring break. It is the student's responsibility to schedule a time to meet with his/her advisor during this two week timeframe.
 - Fall advisement – you are advised for spring term only
 - Spring advisement – you will be advised for summer and fall, one advisement form for both terms. You will also need to note how many credit hours you anticipate enrolling for the upcoming spring term – course number not needed, just anticipated credit hours.
- After you have met with your advisor, bring advisement form to C218 to have advisement hold lifted.
- Special Enrollment – this is when all required degree course work is complete and you are working on research and writing thesis/dissertation. This is allowed for two terms total and must be applied for at time of advisement/registration. Review qualifications in guideline book and/or graduate student bulletin (see course enrollment load).

Registration

- Graduate student registration appointments, or time tickets as referenced in banner, begin the first week after advisement ends.
- Each graduate student is assigned a time ticket by the registrars office – viewable in my.sc.edu. Know your time ticket and REGISTER during that time. It is your responsibility to know this and register. (be advised PRIOR to the assigned time ticket).
 - Fall - you will register for spring classes
 - Spring - you will register for both summer and fall classes.
- If you are a newly admitted student, please review your admission notification from the graduate school for conditions placed on your admission. These conditions, if not cleared with the graduate school, may prevent you from registering for courses for a second term. ECIV 799/899 – you must register for these classes by using the CRN (5 digit number) associated with your faculty advisor.
- ECIV 798, Seminar. All students hired as GA's and/or considered full time (9 credit hours) must register for ECIV 798 each semester it is offered (typically fall and spring). All other students are exempt from enrollment, but are invited to enroll/participate as they wish.
- Registration issues should be sent to ammarell@cec.sc.edu. Please include course number and the exact wording of the error message.
- After the second or third day of classes you need to verify your enrollment for current term.

Hires

- GA hire effective dates: Spring term: January 1 – May 15 (4.5 months), Summer term: May 16-August 15 (3 months), Fall term: August 16-December 31 (4.5 months).
STUDENTS MUST BE REGISTERED FOR HIRE PAPERWORK TO BE APPROVED AT ALL LEVELS. If you are not registered, you will not be hired for term and this will cause an interruption in your paycheck. (refer back to second item under registration).
 - Pay based on \$18,000.00 annually: \$1500.00 per month. Fall/spring = \$6750.00 (\$1500.00 x 4.5), summer=\$4500.00 (\$1500.00 x 3).
- How does my hire affect my tuition charges? - Tuition charges are based on in-state and out of state rates. If you are not a resident of SC or an international student – you will be assessed enrollment charges based on out of state rates. Your tuition is reduced to in-state only after your hire has been approved by the Graduate School and status is updated to GA for each term. (again, the graduate school will not approve your hire if you are not enrolled for term of hire or if you are enrolled for 1 credit hour and have not submitted special enrollment forms).
- When I submit hires for each term I assume you have followed the USC process for advisement/registration. I do not check your enrollment status for each term. If/when your hire is rejected for lack of enrollment, there is NOTHING that notifies me that your hire was rejected. As a result you are not hired, your tuition remains charged at out of state rates, tuition does not get paid and you are dropped from the courses you have registered for and you don't get a paycheck.

Tuition Supplements

- If your tuition costs, or a portion of your tuition costs, are covered by your faculty advisor, you MUST provide a copy of your tuition bill to the department when in-state rates have applied to your bill. You will see this when line item “COL Graduate Asst. Exemption” is noted on your tuition bill. When a copy of the reduced tuition bill is provided, the tuition supplement paperwork will be submitted. **IF YOU FAIL TO PROVIDE A TUITION BILL, THE TUITION SUPPLEMENT WILL NOT BE SUBMITTED AND YOU WILL BE DROPPED FROM YOUR COURSE ENROLLMENT FOR LACK OF TUITION PAYMENT.**
- Once the tuition supplement is awarded it will be noted towards the bottom of your “print bill for term”. After the tuition supplement is applied to your bill, please send a copy to the department for verification of the tuition supplement award. Any outstanding charges will be the responsibility of the student.
- View the Bursars website to see current term charges, **KNOW WHAT YOUR CURRENT TERM CHARGES SHOULD BE BASED ON YOUR STUDENT STATUS.** (i.e. the student health center fee is based on Graduate Student and hours enrolled as well as Graduate Assistant – key word here is assistant). <http://sc.edu/bursar/>.
- Tuition Charges: Tuition per credit hour, Student Health Center Fee, Technology Fee per credit hour and Mandatory Health Insurance. Additional charges for first term enrollment only: International matriculation fee and Graduate School matriculation fee.
- If you receive a refund by check or electronic deposit **YOU MUST NOTIFY YOUR ADVISOR AND THE DEPARTMENT IMMEDIATELY.**

Mandatory Health Insurance from USC (Thomas Student Health Center)

- Fall and Spring semester ALL graduate students are automatically enrolled in the USC Mandatory Health Insurance at time of registration. You may waive out of this insurance if you carry insurance outside of USC. Waivers must be submitted EACH semester and you will have to provide evidence of other insurance. See Thomas Student Health Center website for instructions on waiving out and the deadline for submitting waiver each

semester. Thomas Student Health Center website: <https://www.sa.sc.edu/shs/> (see “Insurance and billing” and “Mandatory health insurance”).

- Effective Fall 2015 – USC health insurance will no longer be awarded to GA students as part of the tuition supplement. If your faculty advisor covers the cost of insurance, it will be awarded to you as part of your annual stipend, paid fall and spring semesters.

CIVIL AND ENVIRONMENTAL ENGINEERING
Graduate-level Core Courses

Each area of study has a minimum core requirement for the M.S., M.E., and Ph.D. degrees.

Environmental (3 courses)

ECIV 750 - Principles of Environmental Engineering Process

and any two from:

- ECIV 555 - Principles of Municipal Solid Waste Engineering
- ECIV 556 - Air Pollution Control Engineering
- ECIV 558 - Environmental Engineering Process Modeling
- ECIV 751 - Water and Wastewater Treatment Theory I
- ECIV 752 - Water and Wastewater Treatment Theory II
- ECIV 753 - Unit Operations Laboratory for Water and Wastewater Treatment
- ECIV 755 - Industrial Wastewater Treatment

Geotechnical (4 courses)

ECIV 730 - Advanced Soil Mechanics

and any three from:

- ECIV 731 - Slope Stability, Retaining Systems, and Lateral Earth Pressure
- ECIV 732 - Theoretical and Numerical Methods in Geomechanics
- ECIV 733 - Physico-chemical Properties of Soils
- ECIV 734 - Dynamics of Soils and Foundations
- ECIV 736 - Ground Improvement Techniques
- ECIV 737 - Advanced Foundation Design

Structures (4 courses)

ECIV 720 - Advanced Structural Mechanics and Analysis

and any three from:

- ECIV 722 - Theory and Design of Plates and Shells
- ECIV 724 - Dynamics of Structures
- ECIV 725 - Advanced Analysis and Design in Structural Metals
- ECIV 726 - Repair and Retrofit of Structures
- ECIV 727 - Advanced Analysis and Design of Reinforced Concrete
- ECIV 728 - Prestressed Concrete Analysis and Design
- ECIV 737 - Advanced Foundation Design

Transportation Engineering (3 courses)

One from:

- ECIV 535 - Geotechnical Engineering in Transportation
- ECIV 540 - Transportation Systems Planning
- ECIV 541 - Highway Design

and one from:

- ECIV 542 - Traffic Engineering
- ECIV 748 - Traffic Flow Theory

and one from:

- ECIV 705 - Deterministic Civil and Environmental Systems Engineering
- ECIV 706 - Probabilistic Civil and Environmental Systems Engineering

Water Resources (3 courses)

Option One:

Two from:

- ECIV 760 - Computational Hydraulics
- ECIV 761 - Numerical Methods in Subsurface Hydrology
- ECIV 762 - Advanced Hydrology
- ECIV 763 - Unsaturated Flow Theory
- ECIV 764 - Contaminant Transport
- ECIV 765 - Erosion and Sediment Control
- ECIV 766 - Fluid Transients
- ECIV 767 - Sediment Transport and River Mechanics

and one from:

- ECIV 560 - Open Channel Hydraulics
- ECIV 562 - Engineering Hydrology
- ECIV 563 - Subsurface Hydrology

Option Two:

Three from:

- ECIV 760 - Computational Hydraulics
- ECIV 761 - Numerical Methods in Subsurface Hydrology
- ECIV 762 - Advanced Hydrology
- ECIV 763 - Unsaturated Flow Theory
- ECIV 764 - Contaminant Transport
- ECIV 765 - Erosion and Sediment Control
- ECIV 766 - Fluid Transients
- ECIV 767 - Sediment Transport and River Mechanics

University of South Carolina
College of Engineering and Computing
Civil and Environmental Engineering
Faculty List

Name	Office	Phone Area code 803	Email
Dr. Nicole Berge Outreach Coordinator SWE Advisor	C106 Environmental	777-7521	berge@cec.sc.edu
Dr. Juan Caicedo Undergrad. Director Chi Epsilon Advisor	C207 Structures	777-1925	caicedo@cec.sc.edu
Dr. M. Hanif Chaudhry	C224 Water Resources	777-3652	chaudhry@cec.sc.edu
Dr. Joseph Flora	C209 Environmental	777-8954	flora@cec.sc.edu
Dr. Sarah Gassman	C226 Geotechnical	777-8160	gassman@cec.sc.edu
Dr. Shamia Hoque	C108 Environmental	777-2288	hoques@cec.sc.edu
Dr. Nathan Huynh	C211 Transportation	777-8947	huynhn@cec.sc.edu
Dr. Jasim Imran	C225 Water Resources	777-1210	Imran@cec.sc.edu
Dr. Fabio Matta Graduate Director	C210 Structures	777-1917	mattaf@cec.sc.edu
Dr. Steve McAnally	C117 Environmental	777-7403	mcanally@cec.sc.edu
Dr. Michael Meadows	C118 Water Resources	777-3826	meadows@cec.sc.edu
Dr. Robert Mullen Department Chair	C230 Structures	777-3614	rlm@cec.sc.edu
Dr. Charles Pierce	C212 Geotechnical	777-3855	piercec@cec.sc.edu
Dr. Dimitris Rizos Assoc. Chair AREMA Advisor	C208 Structures	777-6166	rizos@cec.sc.edu
Dr. Inthuorn Sasanakul	C227 Geotechnical	777-7160	sasanaku@cec.sc.edu
Dr. Enrica Viparelli ASCE Advisor	C116 Water Resources	777-7086	viparell@cec.sc.edu

Faculty List cont.

Name	Office	Phone Area Code 803	email
Dr. Yeomin Yoon	C107 Environmental	777-8952	yoony@cec.sc.edu
Dr. Paul Ziehl	C206 Structures	777-0671	ziehl@cec.sc.edu
Department FAX (803) 777-0670			

Staff List

Name	Office	Phone Area code 803	Email
Karen Ammarell	C218 Student Services	777-9482	ammarell@cec.sc.edu
Tina Anderson	C230 Admin Assist to Chair and Department	Phone: 777-8304	andersco@cec.sc.edu
Patrick Blake	C216 – IT	777-0593	blakep@mailbox.sc.edu
Kate Fischer	C229 Admin. Assistant	777-3614 Main Number for Dept.	fischer@cec.sc.edu
Russell Inglett	B104 Research Specialist	777-8946	inglettr@cec.sc.edu
Anne Kawamoto	C223 Admin Assist to Dr. Chaudhry	777-8318	kawamoto@cec.sc.edu
<p>For on-line College of Engineering and Computing directory: http://sc.edu/study/colleges_schools/engineering_and_computing/faculty-staff/index.php</p>			

9/2015/ka

University of South Carolina

Department	Area	Phone Area code 803
Bursar 518 Main Street	Student Accounts	777-4234
	Check Disbursements Financial Aid Checks	777-8140
	Fees and Refunds	777-4233
	Legal Residency	777-4060
Graduate School	Main Number	Ph. 777-4243 Fax: 777-4153
ID Cards	Carolina Card/USC ID	777-1709
Parking Services	Main Number	777-5160
Payroll	Graduate Assistant Payroll	777-5080
Police	USC on-campus dispatch	777-4215
Thomas Student Health Center	Immunization Coordinator	777-9511
	Health Insurance Office	777-1916
Registrar	Information, records, registration and transcripts	777-5555 Automated message

Guide for purchasing computers within the Department of Civil and Environmental Engineering

In the beginning of each semester I build a few default configurations of computers from Apple and Dell. If you wish to purchase a new computer, please contact me with the following information:

- Any specific software you will be using
- What your primary intended use is (Computational? Data Acquisition? Research?)
- Any other specific needs you may require outside of the default packaging.

For what the default configurations have here is a little guidebook.

Desktops:

- A higher end current generation processor
- A minimum of 8GB of RAM
- An Nvidia Cuda compatible graphics card
- 320GB Hard Disk minimum

Laptops:

- A higher end current generation processor with focus on power efficiency
- A minimum of 8GB of RAM
- An Nvidia Cuda compatible graphics card when available
- 320GB Hard Disk minimum

Overtime my preferred vendor may change, but you can guarantee that these are the minimum requirements I set forth personally so that the computers will have a longer than average useful lifespan. I understand that there are many different needs cases within a department doing as much research as ours, so please contact me with your specific needs and we can work together in order to find a computer that will suit all needs perfectly.

Patrick Blake
CEE-IT
300 Main St., Room C216

Safety and Procedures Manual

2015

University of South Carolina
Civil and Environmental Engineering

- Structures Lab
- Hydraulics Lab
- Materials Lab
- Geotechnical Lab
- Environmental Labs

The University Safety Policy and Procedures Manual will take precedence over this manual in the event of a conflict.

The University Safety Policy and Procedures Manual can be found at the following web addresses:

<http://www.sc.edu/ehs/Guides/profile.htm>

<http://www.sc.edu/ehs/LabSafety.htm>

Safety

- All students, faculty, and staff that are working in the labs are required to read and sign off on Safety and procedure manual
- No open toe shoes in lab areas (i.e., flip flops, sandals, etc.)
- Hard Hat required during crane operation and/or working overhead
- Safety glasses at all times
- Earplugs when necessary
- Dust masks when needed
- Crane, forklift, and tool use by authorized personnel only
- Lab areas must be maintained and cleaned at all times (Before, during, and after projects)
- No thru traffic in any labs
- No propping of outside doors
- It is up to the student and/or advisor to notify Research Specialist of any hazardous chemicals that will be involved during a project. Training will be required.
- MSDS must be filed with Research Specialist before use
- Student should not attempt to repair any equipment without RS and Advisor approval
- Any malfunctioning, broken, or non-operational equipment will be reported immediately to the Research Specialist.
- Visitors to the labs will need Research Specialist and or Faculty approval

Lab Procedures

Email Research Specialist with all information regarding projects before start of project.

- Projected start and end dates
- Drawings
- Material List
- List of tools that will be required
- List of training that the student will need to carry out their project in a safe manner
- The projected amount of space that the project will consume
- Any specialty tools that the project will require will be the responsibility of the Advisor to purchase
- Any replacement of consumables will be the responsibility of the Advisor to purchase (Drill bits, screws, etc.)
- Personnel involved with project and contact information for all involved (Advisors included)
- Fund Numbers to which the project supplies will be charged

Note that:

- Purchases for a project will not be made unless first approved by the advisor via email with fund number attached to approval email
- Project storage is the responsibility of the student and their advisor. Compromises can be made with research specialist depending on scale, duration of project and space availability.
- It is the Responsibility of the student to mark his project materials with date (Keep, Do Not Discard, etc.)

- All lab doors will be secured at 5:00pm (If after hours work is needed please consult the Research Specialist)
- All tools will be returned to their place in the tool rooms at the end of every day. (if tools are needed beyond regular working hours, please consult the research specialist)
- Scrap material should be placed in the designated areas. They will be thrown away if they are not.
- The department will provide Personal Protective Equipment (PPE). If Personal Protective Equipment (PPE) is missing or in need, please alert the Research Specialist immediately.
- Tools, equipment, facilities that are broken or damaged as a result of abuse and/or misuse will be replaced at advisors expense

Disciplinary Actions by Research Specialist

Disciplinary action for violation of these rules will be administered by the Research Specialist. Actions include: documented verbal warning, documented written warning, suspension of lab privileges for one day. Continuing violations and/or serious infractions will be addressed by a meeting with student, Research Specialist, Advisor and Department Chair.

Russell Inglett
Research Specialist
Department of Civil and Environmental Engineering
300 Main Street, Room B104

Acknowledgment of Safety and Procedures

Signature below is evidence that I have read the Safety and Procedures Manual and am bound to adhere to these rules as endorsed by the Civil and Environmental Engineering Department. I also have read and fully understand the Disciplinary Actions when/if I am in violation of safety and procedures.

Program Area: Envi. Geo. Stru. Trans. Water Res.

Student printed Name: _____

Student Signature: _____ Date: _____

Advisor printed Name: _____

Advisor Signature: _____ Date: _____

Research Specialist: _____ Date: _____

Russell Inglett

This form is to be removed from guideline manual, signed by the student, faculty advisor and returned to the Research Specialist for file purposes.

My Signature above acknowledges that I am aware of the disciplinary actions as stated on page 30 (and copied below) of the PhD Guidelines Book:

Disciplinary action for violation of these rules will be administered by the Research Specialist. Actions include: documented verbal warning, documented written warning, suspension of lab privileges for one day. Continuing violations and/or serious infractions will be addressed by a meeting with student, Research Specialist, Advisor and Department Chair.