Civil and Environmental Engineering

Molinaroli College of Engineering and Computing

UNIVERSITY OF SOUTH CAROLINA

GRADUATE STUDENT HANDBOOK

DOCTOR OF PHILOSOPHY (PH.D.)

1. GENERAL

The following guidelines are intended to complement the online Graduate Studies Bulletin in assisting current and prospective graduate students with planning for and pursuing a Ph.D. degree in Civil Engineering at the University of South Carolina (USC). These guidelines neither replace nor supersede any requirements set forth in the Graduate Studies Bulletin.

Graduate students are responsible for familiarizing with the rules and policies in effect at the time of first enrollment in the Ph.D. program, satisfying all requirements, and discussing with their academic advisor regarding scheduling the examinations and submitting the documentation, in accordance with the Graduate School and Department of Civil and Environmental Engineering (ECIV) regulations.

In these guidelines, all italicized text denotes information on policies, regulations and requirements set forth by the USC Graduate School.

Students enrolled in a doctoral program have ten years from the first term of enrollment in which to complete the degree (courses become invalid after 10 years).

1.1 Major components of ECIV Ph.D. degree program

The ECIV Ph.D. program prepares graduates to meet growing demands for advanced research in specialized areas of civil and environmental engineering. Major components include:

- Research resulting in a dissertation proposal, a dissertation, a dissertation defense, and 12 hours of dissertation credit.
- Qualifying and comprehensive exams.
- 48 credit hours of graduate-level coursework beyond the baccalaureate degree, including at least 12 hours of graduate-level program area core courses. Up to 30 credit hours of approved courses from a prior master's degree may be transferred to meet this requirement.
- At least half of the graduate-level coursework must be at the 700-level or above.
- For students pursuing a Ph.D. degree in a different area of specialization from their master's degree, a minimum of 24 credit hours of course work in the new area of specialization is required.
- Ph.D. students are encouraged to take courses in areas of interest outside the Department of Civil and Environmental Engineering, leveraging the breadth and depth of course offerings across the USC campus.

Civil Engineering Ph.D. students develop a deep understanding in an advancing field of civil and environmental engineering and the ability to apply that understanding to solve a variety of technical and societal problems. The ability to execute a research plan, to generate and analyze original results, and to communicate those results through oral presentations and written publications is a distinguishing feature of the Ph.D. program.

1.2 Additional requirements

The following requirements also apply:

- All graduate students are required to attend ECIV 798 – Seminar in Civil and Environmental Engineering (0 credit hours) each semester in which they are enrolled as full-time students. Full-time students are those supported through a Graduate Research Assistantship and/or enrolled in 9 or more credit hours in a given semester. All graduate students are encouraged to enroll in ECIV 798.

- A maximum of 6 credit hours of ECIV 797 – Research in Civil Engineering can be used toward the Ph.D. program of study beyond the baccalaureate degree.

- Enrollment in ECIV 790 (Special Topics) courses can be used as a prescribed core course requirement, with approval of the student's faculty advisor and the Graduate Director. Final approval for use as degree credits lies with the Graduate School.

- A maximum of nine credit hours of course work may be transferred from another institution for credit toward a Ph.D. degree, in compliance with the requirements set forth in the Graduate Studies Bulletin (see 'Transfer Credit' under 'Doctoral Degree Requirements').

- The ECIV Ph.D. degree program does not have a foreign language requirement.

- Ph.D. students must maintain a minimum 3.0 GPA on coursework required for the degree program. Failure to fulfill this requirement may result in academic probation and/or suspension from the program.

- Ph.D. students must perform research and other duties in accordance with and as assigned by their respective faculty advisors. Each semester, faculty advisors evaluate the performance in the program of students supported through Graduate Research Assistantships; failure to meet the requirements and expected research performance can result in the termination of the Graduate Research Assistantship.

1.3 Areas of specialization

Civil engineering is a broad and interdisciplinary field. The Ph.D. degree program is designed to help students develop expertise in a specific core subject area of civil and environmental engineering. As such, Ph.D. students are required to take a minimum of four core courses within a selected area of specialization. Available areas of specialization include:

- Environmental Engineering
- Geotechnical Engineering
- Railway Engineering
- Structural Engineering
- Transportation Engineering
- Water Resources Engineering

In addition, a Graduate Certificate in Railway Engineering may be earned concurrently with any graduate degree in Civil Engineering.

2. ADVISEMENT

Every graduate student admitted to a degree program is entitled to an advisor. The academic program Graduate Director is the default academic advisor for graduate students until another academic advisor is assigned or an advisory committee is formed.

2.1 General

Students must meet with their advisor each spring and fall to discuss degree progress and select courses to fulfill the degree requirements.

The Department of Civil and Environmental Engineering dedicates one week in each spring and fall semester to advise graduate students. In the spring, each student is to be advised for the upcoming summer and fall terms. In the fall, each student is to be advised for the upcoming spring term. Graduate students must schedule an advisement appointment with their advisor, and complete an advisement form that must be signed by both student and academic advisor. This form must be submitted in person or via email to ECIV Student Services to have the advisement hold lifted, and to have any necessary overrides to ECIV courses processed.

2.2 Distance education

Many academic programs offer courses and degree programs via distance education using multiple delivery methods, both in synchronous and asynchronous modes. Courses are offered during fall, summer, and spring terms. All courses delivered through distance education are approved by the appropriate academic authority as suitable for distance delivery, are subject to the same academic policies and regulations, and meet the same University standards of rigor, prerequisites, sequence, etc., that are required in residence course work. Students should consult with the individual academic programs for courses and degrees offered via distance education.

APOGEE students are expected to meet with their faculty advisors either in person or remotely, and communicate via email and phone. For the purpose of advisement, APOGEE students must complete the APOGEE Advisement Form, and have the form signed by the academic advisor and submitted to ECIV Student Services. The student will be notified via email when the advisement hold has been lifted. All courses offered asynchronously via video streaming in the Molinaroli College of Engineering and Computing are indicated by section J60 and above. Non-APOGEE students are restricted from enrolling in and having access to video streaming.

3. ENROLLMENT REQUIREMENTS

Ph.D. students enrolling for the second term should review the admission confirmation notification (to be received via email from the USC Graduate School) for any conditions placed on their admission. If not resolved during the first term of enrollment, these conditions will prevent students from enrolling for a second term.

These conditions typically include the submission of official transcripts, GRE, TOEFL and IELTS official test scores, and English for Foreign Students (ENFS) conditions. For example, the Department of Civil and Environmental Engineering may have placed a condition for taking or retaking the GRE during the first term of enrollment, obtaining a minimum grade of B in ECIV graduate courses, and/or completing prerequisite courses (*e.g.*, to remove deficiencies). Ph.D. students with the aforementioned admission conditions may not have the advisement hold lifted until said conditions are met.

3.1 Enrollment load

Full-time Ph.D. students must be enrolled for nine to 12 credit hours.

Part-time Ph.D. students must be enrolled for a minimum of three credit hours.

Ph.D. students who receive financial support from ECIV as Graduate Research Assistants must satisfy the following enrollment requirements*:

- Spring and fall terms: minimum six credit hours.
- Summer term: minimum three credit hours (or for international graduate students a minimum of six credit hours if this is the first enrollment term).

* These credit hour requirements are mandatory for ECIV Graduate Research Assistantship positions. Any credit hours less than noted above will require graduate students to submit a Special Enrollment (Z-Status) form at the time of advisement. It is noted that the Doctoral Program of Study (DPOS) form must be on file prior to applying for Z-Status. In addition, international students have a one-time Reduced Course Load Request For F-1 and J-1 Student Visas form to submit to the Office of International Student and Scholar Support (iss@sc.edu). See MCEC qualification statement, pg. 6.

All Ph.D. students must be enrolled in the semester in which they apply to graduate.

ECIV 797, 799 and 899 are variable credit hour courses. When registering, Ph.D. students are responsible for manually entering the number of credit hours they wish to enroll.

Enrollment exceptions must be approved by the Graduate School.

A student must be enrolled for at least one credit hour during any semester (including the semester in which the students applies to graduate) in which dissertation progress is made and such University resources as the library, computer facilities, or faculty time are used.

3.2 Special enrollment (Z-Status)

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 or 6 hours for students serving as graduate assistants. A Z-Status request for under-enrollment privilege must be term-specific and is limited to two terms. Z-Status for under-enrollment privilege may be extended beyond two terms with the approval of and justification from the academic unit and with the approval of the dean of the Graduate School.

All requests for Z-status are now routed through the MCEC dean's office and will only be approved for FMLA or childbirth/adoption cases, as well as if a student needs to be away on an internship related to their research, or similar special cases. All requests will require MCEC dean's office sign off.

4. REGISTRATION

All Ph.D. students are assigned a day and time in which they can register for courses. The Office of the University Registrar refers to this as 'time ticket'. Students can view their time tickets via my.sc.edu before registering.

Any holds on the registration will be noted in my.sc.edu, including what USC unit (*e.g.*, office, department) has placed the holds. Students will need to contact said unit directly to have the holds lifted.

In the spring term, students will register for both the upcoming summer and fall terms. In the fall term, students will register for the upcoming spring term.

In a given term, for all adds, section changes, or credit/audit changes made after the deadline dates as printed in the Academic Calendar, students are required to submit a Registration Exception (AS-199) form, with the appropriate signatures, to the Office of the University Registrar.

Registration in **ECIV 797**-Research in Civil Engineering, requires an Independent Study Contract to be completed by student and the instructor. The completed form should be submitted to CEE Student Services for collecting signatures and processing.

5. EXAMINATIONS

The Ph.D. degree program includes two examinations that must be passed before submitting and defending the doctoral dissertation:

1) Qualifying Examination, which aims to assess academic proficiency on the fundamentals of Civil Engineering pertinent to the student's respective area of specialization (environmental, geotechnical, railway, structural, transportation or water resources engineering).

2) Comprehensive Examination, which aims to evaluate the Ph.D. candidate's research plan towards completing and defending the doctoral dissertation.

The ECIV 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 to:

- Encourage candidates to assemble, reexamine, and put into perspective the subject matter of their previous education.
- Evaluate the maturity, resourcefulness, and self-confidence of the candidates.
- Establish the depth of the student's technical knowledge and competence.
- Identify weaknesses and provide opportunities for overcoming them.
- Assess the student's ability to complete a doctoral dissertation in a reasonable period of time.

5.1 Qualifying Examination

The Qualifying Examination is comprised of a written part and an oral part and is administered by a committee of no fewer than three USC faculty with expertise in the student's area of specialization. The Ph.D. student, with the assistance of the academic advisor, should discuss the scope of the examination material with the members of the student's Qualifying Examination Committee at least one month prior to the examination.

The Qualifying Examination is typically taken once the candidate has completed the required core courses in the area of specialization. Normally, this will occur after the first year of study. The Qualifying Examination is administered up to twice a year during the spring and the fall semester, respectively. The written part is administered first followed by the oral part. The two parts are usually administered on different days. Students should consult with their academic advisors regarding the Qualifying Exam schedule in a given year.

Upon nomination from the doctoral program, the dean of the Graduate School considers a Ph.D. student for admission to doctoral candidacy only after the student:

- *Is fully admitted to the Ph.D. degree program by the academic unit.*
- *Passes the Qualifying Examination.*

- *Submits an approved doctoral program of study to the dean of The Graduate School* through the USC Doctoral Degree Program of Study (DPOS) form.

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.

5.2 Comprehensive Examination

Candidates must pass a written and oral Comprehensive Examination conducted by the student's academic program under the direction of the Written and Oral Comprehensive Examination Committee. This Committee must be comprised of no fewer than four members, at least one of whom must be from outside the candidate's major department. Normally, the Comprehensive Examination is given after the candidate has completed all course work on the program of study except for courses in which the student may be currently registered. The Comprehensive Examination may not be given less than 60 days before the candidate receives the degree.

Note: certification of the Comprehensive Examination for doctoral students remains valid for five years from the academic term taken, after which it must be revalidated.

The Comprehensive Examination is designed to test the Ph.D. candidate's comprehension and depth in the area of specialization in which the students is pursuing research. The Comprehensive Examination consists of a detailed research plan proposal that is designed to lead to an acceptable doctoral dissertation. The candidate must document the research plan proposal in written form and deliver an oral presentation of the plan to the candidate's Comprehensive Examination Committee.

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 proposal should have some specific objectives and a rational plan to attain them.

The Comprehensive Examination Committee will evaluate the Ph.D. 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 Ph.D. candidate should demonstrate to be well versed in relevant areas relating to the proposed dissertation topic.

The written proposal should be submitted to the candidate's advisor at least one month before the examination, and to the Comprehensive Examination Committee at least one week prior to the examination. The written proposal should be approved by the candidate's advisor before being submitted to the Comprehensive Examination Committee. The candidate is responsible for scheduling the date of the Comprehensive Examination in consultation with the advisor and the Comprehensive Examination Committee.

6. DISSERTATION AND DEFENSE

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 Doctoral 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 Doctoral Committee.

6.1 Dissertation submission

The dissertation is submitted to the Graduate School through the Electronic Thesis and Dissertation (ETD) submission process. Instructions for submission should be read thoroughly and followed explicitly, including deadlines for format check and final submission.

The preliminary dissertation document will need to be submitted electronically to the Graduate School for a format check not later than five weeks before graduation through the ProQuest/UMI ETD portal. The Electronic Thesis and Dissertation coordinator for the academic program will respond with any needed corrections or revisions. At least 20 days prior to graduation, the candidate must submit the final revision of the dissertation through the ETD process. Students will receive notification of receipt of the final dissertation submission from the Graduate School program coordinator.

The dissertation must be reproduced by ProQuest/UMI for archival purposes as per the laws of the State of South Carolina and must be archived by the University library. The dissertation abstract will be published in the dissertation database. Additional information on publication and copyright options is available on the website of the Graduate School. Students using previously published articles as dissertation content must submit a copyright release from the publisher of the articles.

No paper copies of the dissertation are required by the Graduate School.

6.2 Dissertation defense

A dissertation must be successfully defended before the Doctoral Committee. The dissertation defense should be no fewer than 30 days before the date of graduation. The Graduate School requires that the dissertation defense be publicly announced.

Detailed information on procedure and related forms (G-DSF, SED) are provided via the Graduate Studies Bulletin. (see "Dissertation Defense").

7. RESIDENCY REQUIREMENTS

The intent of a residency requirement is to ensure that doctoral students benefit from and contribute to the full spectrum of educational and professional opportunities provided by working closely with the graduate faculty and other students of a research university.

At USC, residency requirements may be met in one of two ways:

- *Option 1: two consecutive semesters of full-time enrollment. Full time enrollment is defined as enrollment for six hours for students serving as graduate assistants and nine hours for students who are not graduate assistants; consecutive semesters could be fall/spring, spring/summer, summer/fall, or spring/fall. Programs are expected to provide enrichment opportunities beyond course enrollment to help doctoral students understand and meet the intention of the residency requirements.*

- *Option 2: program-specific alternative residency plan. Diverse academic traditions and rapidly changing technology are factors that make a single approach to meeting the intention of a residency requirement problematic. Hence, program representatives may propose alternative methods to achieving the residency goals. This proposal would be submitted to the associate dean of the Graduate School for consideration by the Graduate Council.*

7.1 On-campus students

For the purpose of fulfilling residency requirements, non-APOGEE Ph.D. students in the Department of Civil and Environmental Engineering are required to follow Option 1, (see Residency Requirement). If the student has completed all required coursework, ECIV 899 – Dissertation Preparation in Civil Engineering may be used to fulfill the residency requirements.

7.2 Distance education (APOGEE) students

APOGEE students should consult with their faculty advisor to discuss options for fulfilling residency requirements for the degree, and related arrangements for the Qualifying Exam, Comprehensive Exam, and Dissertation Defense.

8. LABORATORY SAFETY TRAINING

Training requirements for laboratory personnel are based on the type of hazardous materials utilized in the laboratory where research is conducted. Research safety training is designed to ensure that students understand and are able to execute proper protective measures to mitigate potential hazards and associated risks.

USC's Office of Environmental Health and Safety trainings are intended to cover the basic principles and practices for safely performing research involving common laboratory hazards.

All graduate students who utilize ECIV's experimental facilities are required to complete the following two Research and Laboratory Safety Trainings:

1) Chemical and Lab Safety, to be renewed every four years.

2) Hazardous Waste, one-time classroom course followed yearly by an online refresher.

Upon successfully completing each training or refresher, students must provide a copy of the certificate via email to the ECIV Research Specialist and faculty advisor. Failure to comply with this requirement may result in the termination of a student's Graduate Research Assistantship.

9. GRADUATE TEACHING AND INSTRUCTIONAL ASSISTANTS

The Southern Association of Colleges and Schools (SACS) and the USC Graduate School require that newly appointed Graduate Teaching Assistants (GTA) and Graduate Instructional Assistants (GIA), as well as any graduate student who is working with student materials (grading) or interacting with students in any way (*e.g.*, office hours, tutors), participate in the following two-part training program.

1) GTA/GIA Orientation Workshops: GTA/GIA students must participate in two three-hour workshops that are aimed to develop skills to prepare to teach at USC. Advanced registration is required via the Center for Teaching Excellence website. Students will select the session(s) that fit their schedule.

2) GRAD 701: GTA/GIA students are required to take this formalized professional Teaching Assistant Development course during or before the first semester of teaching. ECIV GTA/GIA students must register for GRAD 701, Sec. 001 via my.sc.edu.

In addition, all international graduate students who will be newly appointed GTAs/GIAs must participate in an International Student Services (ISS) Orientation, an International TA Training speaking assessment practice workshop (ITA Workshop), and subsequently have their English proficiency assessed (ENFS Assessment) through USC's English Programs for Internationals (EPI) prior to the start of classes. The following graduate policies and regulations apply.

- *Accreditation standards require USC to monitor the quality of instruction provided by graduate assistants hired as teaching assistants. In order to perform teaching duties, a graduate assistant must attend the University-sponsored teaching skills workshop (TA Training) offered by the Graduate School before the start of the fall term prior to beginning teaching duties. Students need only attend the workshop once and will be placed in the trained GTA database when all requirements have been met.*

- *In order to teach as an ITA (instructor of record) the student must attend the teaching skills workshop (TA Training) offered by the Graduate School before the start of each fall term prior to beginning teaching duties, have at least 18 semester hours of graduate work in the discipline being taught, and must work under the supervision of a faculty member. Graduate teaching assistants must be monitored and regularly assessed for teaching effectiveness by the supervising faculty member and the academic program. Students need only attend the workshop once and will be placed in the trained ITA database when all requirements have been met.*

- *The SC Legislature mandates that all instructors at USC have adequate proficiency in English. International graduate students for whom English is not the primary language can be appointed as teaching assistants only if oral proficiency in English has been evaluated as satisfactory by the faculty of the EPI. Mandatory for all international students appointed as graduate teaching assistants, the evaluation workshop is held prior to the start of each fall term, three days before the teaching skills workshop (TA Training) offered by the Graduate School that all prospective GTAs and ITAs must complete. Students who demonstrate sufficient English proficiency and complete all other*

requirements, including the TA Training workshop, will be placed in the GTA/ITA database.

10. REQUIREMENTS AFTER GRADUATION

All Ph.D. students are required to do the following after completing their program.

- Returning all keys: all keys must be returned to 300 Main St., Room C230.

- Cleaning up: students are required to clean out assigned workspace (office and laboratory) of all personal research- and course-related materials prior to returning keys and graduating. All borrowed items should be returned to the owner(s). Any unused office supplies (including empty binders, staples, paper, pens, etc.) are to be returned to 300 Main St., Room C230. Disposal of any research-related materials in the laboratories should be approved by the student's academic advisor.

- Providing contact information: students should provide their contact information prior to leaving, and should provide updates in case of changes in home address and career moves. This information should be emailed to ECIV Student Services.

- Scheduling an exit interview. Students are invited to schedule an exit interview with the ECIV Department Chair prior to final departure from USC and embarking on a new journey. This is an opportunity for students to share their experiences, good and bad, as a graduate student. What is the Department doing right and what can the Department improve on? Student feedback is invaluable and allows the Department to grow and to better understand the needs of our students. If you wish to share your thoughts contact ECIV Admin. Assistant.

11. ACADEMIC INTEGRITY

11.1 USC Honor Code

The USC Honor Code is a set of principles established by USC to promote honesty and integrity in all aspects of the campus culture. It is the responsibility of every student at USC to adhere steadfastly to truthfulness and to avoid dishonesty in connection with any academic program. Students who violate, or assist others in violating the Honor Code, will be subject to University sanctions.

Students are expected to abide by the USC Honor Code, and practice the highest possible standards of academic integrity. Violations of the USC Honor Code include any of the following actions:

A. Plagiarism: use of work or ideas without proper acknowledgment of source.

B. Cheating: improper collaboration or unauthorized assistance in connection with any academic work.

C. Falsification: misrepresenting or misleading others with respect to academic work or misrepresenting facts for an academic advantage.

D. Complicity: assisting or attempting to assist another in any violation of the Honor Code.

Whenever a student is uncertain as to whether conduct would violate the USC Honor Code, it is the responsibility of the student to seek clarification from the appropriate faculty member or instructor of record. Students who have violated the USC Honor Code are subject to both academic and non-academic penalties.

11.2 Copyright infringement

USC 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.

In addition, 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 college.

For more information, please consult http://www.sc.edu/copyright/.

12. REFERENCE USC RESOURCES

The following list includes links to USC webpages of interest for graduate students.

- Bursar's Office: click here. Includes information on tuition and fees, and payment deadlines).
- ECIV Ph.D. degree requirements (from Graduate Studies Bulletin): click here.
- ECIV graduate course descriptions (from Graduate Studies Bulletin): click here.
- CEC Graduate Programs Grievances, Appeals, and Petitions: click here. This guide applies to all graduate programs in the USC Molinaroli College of Engineering and Computing.
- Graduate School 'Academics': click here. Includes information on progress to degree, thesis and dissertation, commencement, regulations and appeals, deadlines.
- Graduate School Forms Library: click here. Includes links to graduate forms, such as program of study*, program of study adjustment, comprehensive exam verification*, request for concurrent enrollment, dissertation signature and approval*, update request (* denotes degree audit document).
- 'Doctoral Degree Requirements' (from Graduate Studies Bulletin): click here. Includes information on requirements such as course enrollment load, program committees, program of study, transfer credit, admission to doctoral candidacy, dissertation submission, defense, application for degree, degree conferral, and academic regalia.
- Graduate Policies and Regulations (from Graduate Studies Bulletin): click here. Includes information on academic regulations such as, attendance, enrollment in courses outside of major, enrollment load, transfer of course credit, dropping a course, grading policies, academic standards for grade point average, progression, graduation.
- Office of International Student and Scholar Support: click here. Includes information on immigration status and access to forms for international graduate students.
- Research and Laboratory Safety Training (from Office of Environmental Health and Safety): click here. Includes information on and schedules of required trainings for graduate students who utilize ECIV's experimental facilities (see Sec. 8 of this Handbook).
- Office of the University Registrar: click here. Includes information on transcripts and records, registration, academic calendars, academic bulletin, final exams, graduation and commencement, and student forms (e.g., Citizenship Verification Form, Registration Exception Form).

- Student Health Services: click here. Includes information on appointments, medical services, mental health, insurance and payments, pharmacy, wellness and prevention.

13. ECIV FACULTY CONTACT INFORMATION

Name	Office Program Area	Phone Area Code (803)	Email
Dr. Nicole Berge Undergraduate Director	C106 Environmental	777-7521	berge@cec.sc.edu
Dr. Juan Caicedo Department Chair	C230 Structures	777-1925	caicedo@cec.sc.edu
Dr. M. Hanif Chaudhry Director Engineering Mgmt. Program, Associate Dean Int'l Programs	C224 Water Resources	777-3652	chaudhry@cec.sc.edu
Dr. Melih Calamak	C206 Instructor	777-4625	calamak@cec.sc.edu
Dr. Yuche Chen	C211 Transportation	777-9105	chenyuc@cec.sc.edu
Dr. Joseph Flora	C209 Environmental	777-8954	flora@cec.sc.edu
Dr. Sarah Gassman Graduate Director	C226 Geotechnical	777-8160	gassman@cec.sc.edu
Sean Higgins	C107 Instructor	777-8952	Higgins5@mailbox.sc.edu
Dr. Shamia Hoque	C108 Environmental	777-2288	hoques@cec.sc.edu
Dr. Jasim Imran	C225 Water Resources	777-1210	Imran@cec.sc.edu
Dr. Fabio Matta	C210 Structures	777-1917	fmatta@sc.edu
Dr. Michael Meadows	C207 Water Resources	777-3614	meadows@cec.sc.edu
Dr. Robert Mullen	C118 Structures	777-3614	rlm@cec.sc.edu
Dr. Charles Pierce Faculty Director, Engineering and Computing, LLC	C212 Geotechnical	777-3855	piercec@cec.sc.edu
Dr. Yu Qian	C228 Geotechnical/Railway	777-8184	yuqian@sc.edu
Dr. Dimitris Rizos CEE Associate Chair Director, Railway Engineering Certificate	C208 Structures/Railway	777-6166	rizos@cec.sc.edu
Dr. Inthuorn Sasanakul	C227 Geotechnical	777-7160	sasanaku@cec.sc.edu
Dr. Enrica Viparelli	C116 Water Resources	777-7086	viparell@cec.sc.edu
Dr. Paul Ziehl Associate Dean for Research Director of the McNair Aerospace Center	3A41-SWG Structures	777-0671	ziehl@cec.sc.edu

14. ECIV STAFF CONTACT INFORMATION

Name	Office Program Area	Phone Area Code (803)	Email
Ms. Karen Ammarell Student Services	C221	777-9482	ammarell@cec.sc.edu
Ms. Rachel Dotter Administrative Assistant	C230	777-3416 Main office number	rep@email.sc.edu
Mr. Russell Inglett Research Specialist	C113D	777-3614	inglettr@cec.sc.edu
Mr. Andrew Mitchell IT Services	C216	777-0593	asm16@mailbox.sc.edu
Mr. Travis Weatherford Business Manager	C229	777-8304	weathert@mailbox.sc.edu
Ms. Jamie Wurdinger Program Coordinator Engineering Management	C223	777-8318	jwurd@email.sc.edu

15. PH.D. DEGREE PROGRAM CHECKLIST

The following checklist table is intended to assist Ph.D. students as they pursue their degree. It is the student's responsibility to notify ECIV Student Services via email of any scheduled degree progression so that the necessary forms are provided to the academic advisor and the Doctoral Committee.

Requirement	Notes and Timeline	Check
Program of Study*	Submit form DPOS* by end of fourth semester as Ph.D. student enrolled at USC.	☐
Qualifying Examination Verification*	Typically after one year of study. Form provided by ECIV Student Services to academic advisor. To be submitted to Graduate School together with form DPOS*.	☐
Appointment of Comprehensive Examination Committee*	Four members required (see Graduate Studies Bulletin 'Degree Requirements' for details). Same as Doctoral Committee unless changes are made after Comprehensive Examination. G-DCA* form to be submitted to Graduate School before examination.	☐
Comprehensive Examination Verification*	Comprehensive Examination may not be given less than 60 days before receiving degree. ECIV Student Services will provide form to Graduate Director for signature upon passing examination. Valid for five years.	☐
Comprehensive Examination Evaluation Rubric	Documents provided by ECIV Student Services to academic advisor and Comprehensive Examination Committee (Doctoral Committee).	☐
Dissertation Writing and Format Workshop	Not required but highly recommended. Check with Graduate School for details and to register. For Format Guide, click here.	☐
Dissertation Defense Announcement	No later than two weeks prior to defense date. Email both the ECIV Admin Assistant and Student Services, providing student name, advisor name, program area, abstract, dissertation title, defense date, time, and location.	☐
Dissertation Signature and Approval*	Submit form G-DSF* to ECIV Student Services no later than two weeks prior to defense. Form must be typed, not handwritten, and must include the name of style at the bottom of the form. Form will be provided to Doctoral Committee on date of defense.	☐
Evaluation Rubric Dissertation Defense	Documents provided by ECIV Student Services to academic advisor and Doctoral Committee.	☐
Dissertation Format Check* and Final Submission*	Official Graduate School deadlines calendar applies. These deadlines are mandatory and firm with no exceptions.	☐
Application for Degree* via my.sc.edu (term-specific)	For deadline see "Graduate Studies" via Graduate School website. Schedule preliminary audit of required documents with ECIV Student Services after applying for graduation.	☐
Survey of Earned Doctorates (SED)*	Online survey (click here). Time to complete ~20 minutes. Email confirmation of completion certificate to ECIV Student Services.	☐
Student Key Return/Office Cleanup (if applicable)	Return all keys issued during studies to 300 Main St., Room C230, and clean up office and laboratory space.	☐
Graduate Contact Information	Prior to leaving USC, please email updated contact and employment information to ECIV Student Services.	☐

* Degree audit document that must be on file and approved by the Graduate School.

16. INFORMATION TECHNOLOGY GUIDE

The Department of Civil and Environmental Engineering or the Ph.D. student's research group will provide computer equipment for use at USC.

ECIV Ph.D. students are encouraged to contact Mr. Brian Hull to discuss technology needs and recommended specifications for desktops, laptops, and accessories:

Andrew Mitchell
IT Manager, Department of Civil and Environmental Engineering
300 Main Street, Room C216
Columbia, SC 29208
(803) 777-0593
Asm16@mailbox.sc.edu

Personal equipment (laptops, smartphones, etc.) can be used on USC wireless networks but are not allowed to connect to the USC wired network. University-owned or purchased software cannot be installed on personal equipment.

Personal computers may be purchased at a discount through Dell. For more information, see https://www.dell.com/student. The USC Tech Zone provides assistance with student owned computers.

See:
https://sc.edu/about/offices_and_divisions/division_of_information_technology/end_user_services/available_technology_resources/carolina_tech_zone/

17. LABORATORY SAFETY AND PROCEDURES

The rules and requirements for Laboratory Safety apply to all graduate students utilizing the ECIV laboratory facilities.

These requirements complement the Safety Policy and the Research & Laboratory Safety guidance from the Office of Environmental Health and Safety.

USC has a comprehensive Environmental Health and Safety program. All USC community members are expected to adhere to the policies and protocols to build safety consciousness among students, employees and others while reducing accidents, minimizing potential liabilities, and promoting environmental stewardship.

For additional information and guidance, please contact Mr. Russell Inglett:

Russell Inglett
Research Specialist
Department of Civil and Environmental Engineering
Molinaroli College of Engineering and Computing
300 Main Street, Room C113D
Columbia, SC 29208
(803) 777-9954
inglettr@cec.sc.edu

17.1 Laboratory safety

The following rules and requirements apply.

- All students, faculty, and staff who are working in the ECIV laboratories are required to read the Acknowledgment of Safety and Procedures. (See Research Specialist).
- No open-toe shoes are permitted in laboratory areas (i.e., flip flops, sandals)
- Hard hat is required during crane operation and/or working overhead
- Safety glasses are required at all times
- Earplugs are required when necessary
- Dust masks are required when necessary
- Crane and forklift equipment is to be used by authorized personnel only
- Laboratory areas must be maintained and cleaned at all times (before, during, and after projects)
- No thru-traffic is allowed in laboratory areas
- No propping of doors is allowed
- It is up to the graduate student and/or academic/research advisor to notify the Research Specialist of any hazardous chemicals that will be involved during a project. Training will be required
- Applicable MSDS must be filed with the Research Specialist before use
- Students should not attempt to repair any equipment without the Research Specialist and advisor's approval
- Any malfunctioning, broken, or non-operational equipment must be reported immediately to the Research Specialist
- Visitors to the laboratories will need the Research Specialist and/or faculty approval

17.2 Laboratory procedures

Inform and discuss with the Research Specialist regarding the following items before the start of a given project:

- Projected start and end dates
- Drawings
- List of materials that will be required
- List of tools that will be required
- List of trainings that the graduate student will need to complete the project safely
- Projected amount of space that the project will require
- All personnel involved with project and contact information (advisor/s included)
- Fund numbers to which the project supplies are to be charged

Note that:

- 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
- Purchases for a project will not be made unless first approved by the advisor via email to the Research Specialist indicating the fund number
- Storage is the responsibility of student and advisor. Accommodations may be made by the Research Specialist based on project scale, duration, and available space.
- It is the responsibility of the student to mark the project materials with date ('Keep', 'Do Not Discard', etc.)
- All ECIV laboratory doors will be secured starting at 5:00 pm (if work after hours is needed, please consult the Research Specialist)
- All tools must be returned to their place in the tool rooms at the end of every day. If tools are needed past 5:00 pm, please consult the Research Specialist
- Scrap material should be placed in the project designated areas; they may be discarded otherwise
- The Department of Civil and Environmental Engineering will provide the student with Personal Protective Equipment (PPE). If PPE is missing or in need, please alert the Research Specialist.
- Tools, equipment, and facilities that are broken or damaged as a result of abuse and/or misuse are the responsibility of the student's advisor/s to replace

17.3 Disciplinary actions

Disciplinary actions for violation of these rules and requirements will be administered by the Research Specialist.

Disciplinary actions include: documented verbal warning, documented written warning, temporary suspension of laboratory privileges. Continuing violations and/or serious infractions will be addressed by a meeting with student, Research Specialist, academic/research advisor, and Department Chair.

The below QR code is available inside each lab and should be used as noted to submit requests to the ECIV Research Specialist. *Scan QR code with cell phone camera*.

Service Now Portal

Please use Service Now for all Research Lab Requests, including Purchases.

Service Now QR Code:

1). Affected User: Your Name
2). From Whom are you seeking Assistance: Molinaroli College of Engineering and Computing (CEC)
3). Building: 300 Main
4). Something not on the list