GRADUATE STUDENT HANDBOOK

Master of Science (MS)
Master of Engineering (ME)

Fall 2015
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MASTERS (M.S./M.E.) STUDENT GUIDELINES
Department of Civil and Environmental Engineering (CEE)

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

Master’s of Science (M.S.) – 30 credit hours beyond the baccalaureate, including 6 credit hours of ECIV 799, (thesis preparation). Requires a thesis defense.

Master’s of Engineering (M.E.) – 30 credit hours of course work beyond the baccalaureate degree. This is a non-thesis degree.

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

STUDENT NAME: ______________________________________
FIRST TERM: ________________
ADVISOR: _____________________________________________

GENERAL

The Master of Science and Master of Engineering degrees are designed to provide a strong foundation for pursuing careers in the civil and environmental engineering industry. Areas of study include: Environmental Engineering, Geotechnical Engineering, Structural Engineering, Transportation Engineering and Water Resources Engineering.

The following guidelines are offered to assist master students in preparing for their comprehensive examinations, thesis defense (M.S. only) and graduation. 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 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.
### MASTER of SCIENCE (M.S.) PROGRAM TIMELINE

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<tr>
<th>Requirement</th>
<th>Target Date</th>
<th>Date Completed</th>
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<tr>
<td>Appointment of Thesis Committee</td>
<td>By end of 1\textsuperscript{st} semester</td>
<td></td>
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<tr>
<td><strong>Program of Study*</strong> (form MPOS)</td>
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<td>Comprehensive Exam/Thesis Defense (form G-TSF*)</td>
<td>Final semester</td>
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<td></td>
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<td>Distributed at thesis defense</td>
<td></td>
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<tr>
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<td></td>
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<tr>
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<td>For deadlines see:</td>
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<tr>
<td>Graduate Contact Information</td>
<td>After defense/Prior to graduating</td>
<td></td>
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*It is the responsibility of the student to secure the location for the Thesis Defense. Defenses are typically held in the CEE Department Large Conference Room. See C230 or C229 to inquire about room availability.*

### MASTER of ENGINEERING (M.E.) PROGRAM TIMELINE

<table>
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<tr>
<th>Requirement</th>
<th>Target Date</th>
<th>Date Completed</th>
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</thead>
<tbody>
<tr>
<td><strong>Program of Study*</strong> (form MPOS)</td>
<td>By end of 2\textsuperscript{nd} semester</td>
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<tr>
<td>Appointment of Comprehensive Committee</td>
<td>Prior to submission of comprehensive exam</td>
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</table>
| Comprehensive Exam                               | Completion of core courses  
1. Career Planning Document 
2. Written Summary of ECIV 797 Report |                |
| Application for Degree\* (form AS-126)           | For deadlines see:               |                |
|                                                   | http://gradschool.sc.edu/calendar.asp |                |
|                                                   | Schedule a degree audit with Civil Student Services |                |
| Student Key Return/Office and Lab Clean Up        | When applicable                  |                |
| Graduate Contact Information                      | Prior to graduating              |                |

*Forms must be completed on-line and can be found: www.gradschool.sc.edu/DocLibrary/. Documents noted with an * and in bold type are degree audit documents and must be approved and on file with the graduate school in order to be cleared for graduation. A copy of all forms must be provided to Civil Student Services for record purposes.*

*The M.S./M.E. student is given 6 years to complete all degree requirements.*
ADMISSION

Students with Bachelor of Science (B.S.) degrees in Civil Engineering are eligible to enter the M.S. or M.E. degree programs. The M.E. degree is only available to students with B.S. degrees in engineering. Students with engineering degrees in areas other than civil engineering may be required to complete deficiency/prerequisite undergraduate courses. Outstanding students with non-engineering baccalaureate degrees may qualify for admission to the M.S. degree program, with the understanding that they must take specified deficiency/prerequisite courses. As a minimum, the following deficiency/prerequisite courses or equivalent will be required: MATH 141, 142 and 242; CHEM 111; PHYS 211 and 212; ECIV 200; ECIV 201; STAT 509. Students will also be required to take all undergraduate courses that are listed as prerequisites for courses taken for graduate credit. In general, deficiency/prerequisite courses must be completed with a B average. Specific Program Areas (Environmental Engineering, Geotechnical Engineering, Structural Engineering, Transportation Engineering and Water Resources Engineering) may require additional course work.

An undergraduate grade point average (GPA) of 2.8 on a 4.0 scale, and 3.0 on a 4.0 scale on any graduate course work is required for students wishing to enter the M.S. or M.E. degree programs with B.S. degrees in engineering. Exceptions to the minimum undergraduate GPA requirements for admission to the M.S. and M.E. degree programs may be made for students with special qualifications.

For students with non-engineering baccalaureate degrees, or engineering degrees from programs not accredited by ABET, the minimum grade requirement is a GPA of 3.0 on a 4.0 scale on their undergraduate coursework, and 3.0 on a 4.0 scale on any graduate course work.

The general Graduate Record Examination (GRE) is required for all students entering the M.S. degree program. Typically, successful applicants have combined scores of at least 1100 on the Verbal and Quantitative (V + Q) sections, 3.5 on the Analytical Writing section.

The general Graduate Record Examination (GRE) is not required for students entering the M.E. degree program providing the student has a GPA>2.8 and a B.S. degree in civil or environmental engineering from an ABET accredited school. The GRE is required for applicants not meeting these requirements. Typically, successful applicants have combined scores of at least 1100 on the Verbal and Quantitative (V + Q) sections, and 3.5 on the Analytical Writing section.

International students must obtain a minimum score of 570 (paper-based) or 80 (Internet-based) on the TOEFL exam. The IELTS (International English Language Testing System) exam is accepted in place of the TOEFL with expected minimum score of 6.5. In addition, students whose native language is not English are required to take a diagnostic test in English when they arrive at the University. Students with deficiencies are provided an opportunity for further study in reading, writing and speaking English.

A combined B.S./M.S. or B.S/M.E. (accelerated) degree program is available to undergraduate Civil and Environmental Engineering students with GPAs of 3.5 or above and 90 or more hours earned toward their baccalaureate degrees. Up to 12 credit hours of 500-level or above courses taken as an undergraduate student may be applied toward the M.S. or M.E. Civil and Environmental Engineering degree requirements. A maximum of 6 hours of 500 level courses can be applied to both the B.S. and M.S. or M.E. degrees. The approval of the student’s advisor and the Department of Civil and Environmental Engineering Graduate Director are required. Questions about this program may be directed to the Civil and Environmental Engineering Graduate Director.
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/form/new_imm_form.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 course work 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. Student registration is done by the CEE student services office, C218.
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 $6750 per semester, plus tuition and may also receive tuition fees and health insurance waivers. Tuition and academic fees are published at http://www.sc.edu/bursar/.

Students should consult the Financial Aid and Fellowships section of the Graduate Studies Bulletin for information on non-departmental fellowships and other sources of financial support.

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 M.S. 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 ITA – (International Teaching Assistant) workshop with the EPI 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/uace/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 6 or less years old for Master’s degree 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 Masters 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 Masters 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. Advisement for Summer I, Summer II and Fall Term registration is in the spring; advisement for Spring Term registration is in the fall. Graduate students are assigned a 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).

The Registrar’s office sets the advisement schedule and typically falls before/after fall/spring break and is scheduled for two 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: http://www.ce.sc.edu/ (see quick links). Complete the form and submit
via fax or email for advisor signature. The student will be notified, via email, when his or her registration
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. 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. All M.S. students must be enrolled for at least 1 credit during any semester in which
thesis progress is made and such University resources as the library, computer facilities, or faculty time
are used. 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. Graduate assistants carrying 6 or more hours for graduate credit are
classified as full-time students.

M.E. students may enroll in 3-15 credit hours in spring/fall semesters. Summer session is optional.

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

<table>
<thead>
<tr>
<th>Semester</th>
<th>Number of Credit Hours</th>
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<tbody>
<tr>
<td>Spring</td>
<td>9 credit hours</td>
</tr>
<tr>
<td>May session/Summer I</td>
<td>1 credit hour</td>
</tr>
<tr>
<td>Summer II</td>
<td>1 credit hour</td>
</tr>
</tbody>
</table>
| (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) |                   |
| Fall              | 9 credit hours         |

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

Graduate students receiving assistantships from the department must be registered for courses: fall
semester by August 1st, spring semester by December 1st, and summer session by May 1st. Failing to meet
these registration deadlines can result in a delay in continuing to receive a paycheck and receiving tuition
funds (where applicable).

All M.S. students (including APOGEE) must be enrolled for at least 1 credit (i.e., ECIV 799) during any
semester in which thesis 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 must also submit the approved **Exemption from Full-time Enrollment form**
(http://iss.sc.edu) 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 M.S. degree 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 thesis preparation (ECIV 799). Eligibility requires verification by the student’s academic advisor or program graduate director that:

1) all course work on the program of study has been completed except for thesis preparation (799).
2) the student is working on the thesis full-time, or if applicable, at least half-time; and
3) the student is not employed outside their graduate assistantship or, if applicable, employed no more than half-time if not on a graduate assistantship.

Special Enrollment request for under-enrollment privilege must be term-specific and is limited to two terms. Special Enrollment 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. 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

M.S./M.E. students are allowed an opportunity to earn both a Masters and a PhD degree 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 6 years to complete both degrees.

DEGREE REQUIREMENTS

The requirements for M.S. and M.E. degrees in Civil and Environmental Engineering conform to the regulations of the Graduate School which includes a minimum of 30 credit hours. Graduate courses in Civil and Environmental Engineering are numbered 700 or higher. A limited number of courses numbered between 500 and 699 may be taken for graduate degree credit. Prescribed Core Courses are required for each area of study. The student is responsible for satisfying both departmental and The Graduate School requirements.

M.S.
Students are required to take 24 semester hours of coursework as approved by student’s thesis committee and the Graduate Director and 6 semester hours of Thesis Preparation (ECIV 799). At least 15 hours of coursework must be 700-level or higher. Up to 9 semester hours of coursework may be taken outside of the department for degree credit with the approval of the student's advisor and the Graduate Director.

M.E.
Students are required to take 30 credit hours of coursework or 24 hours of coursework and 6 hours of ECIV 797 (as a Master of Engineering Project) as approved by student’s advisor and the Graduate Director. At least 18 hours of coursework must be 700-level or higher. Up to 12 credit hours of coursework may be taken outside of the department for degree credit with the approval of the student’s advisor and Department of Civil and Environmental Engineering Graduate Director.
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 the seminar.

**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.

<table>
<thead>
<tr>
<th>Degree</th>
<th>Credit hours allowed</th>
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<tbody>
<tr>
<td>M.S.</td>
<td>9</td>
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<tr>
<td>M.E.</td>
<td>12</td>
</tr>
</tbody>
</table>

**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 Master’s 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.

No more than M.S.=9/M.E.=12 semester hours of graduate credit may be transferred into a Master’s program in the CEE department. Only credits with grades of B or better may be transferred from another institution into a Master’s program. Course work transferred for credit toward a Master’s degree must be from an accredited institution and must be no more than 6 years old at the time of graduation. Transfer credit is not posted to the student’s official academic transcript until the term of graduation.

**PROGRAM OF STUDY**

Every student must file a Master’s program of study (M-POS) in The Graduate School for approval by the dean of The Graduate School. A program of study is a list of courses that satisfy degree requirements, and it must be approved by the student’s advisor, the graduate director, and the dean of The Graduate School. The program of study should not list any courses that are not required for the degree. This formal agreement serves a number of purposes that benefit both the student and the University. It allows the student and the advisor to engage in early planning of course work, explore research interests, and discuss requirements for progress toward degree; facilitates subsequent advisement; and protects the student in the event of unexpected curriculum or faculty changes. The student should file a completed Master’s Program of Study form (M-POS) during the first semester. The M-POS must be filed within the first 12 months of course work. If necessary, an approved program of study can be modified with a Program Adjustment form. The MPOS is a degree audit document.
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. Letter grades of
“D” are not allowed.

A maximum of 6 credits of ECIV 797 may be used on the Master’s Program of Study.
USC undergraduate students having participated in the BS/Graduate Accelerated Program may use a
maximum of 12 credit hours on the program of study. A maximum of 6 hours of 500 level courses can be
used for both the B.S. and the M.S. or M.E.

COMPREHENSIVE COMMITTEE (M.E.)

The M.E. Comprehensive Committee must be approved by the Department of Civil and Environmental
Engineering prior to submission of the comprehensive exam. The committee generally consists of the
student’s academic advisor, who serves as the chair of the committee, and one additional faculty member
in the student’s program area: Environmental, Geotechnical, Structures, Transportation or Water
Resources.

THESIS COMMITTEE (M.S.)

The M.S. Thesis Committee must be approved by the Department of Civil and Environmental
Engineering. The committee generally consists of the student’s academic advisor, who serves as the chair
of the committee, and two additional faculty members from the Department of Civil and Environmental
Engineering. Faculty from other Departments on the Columbia campus may also serve on the committee
when appropriate.

The Thesis Committee should be composed only of faculty from the Columbia campus. Regular graduate
faculty of any rank who hold the doctorate or the discipline’s terminal degree and tenured faculty at the
rank of full professor who do not hold the terminal degree may serve on or chair thesis committees.
Research, clinical, and adjunct faculty at any rank who hold the terminal degree may serve on and chair a
thesis committee with approval of the program and the dean of The Graduate School. Instructors and
lecturers who do not hold the terminal degree may serve as members of thesis committees with
justification from the program and approval of the dean of The Graduate School. Emeritus or emeriti
faculty may continue to chair the thesis committee of a student under their direction at retirement and may
be appointed as a member or a thesis committee with the approval of the program and the dean of The
Graduate School.

COMPREHENSIVE EXAM

A comprehensive examination in the major field of study is required for all M.S. and M.E. degree
candidates.

For the M.S. degree, the Comprehensive Exam is administered at the same time as the Thesis Defense.
The Thesis Signature and Approval Form (G-TSF) and the Evaluation Rubric must be completed at time
of defense and paperwork submitted as required by The Graduate School. The G-TSF is a degree audit
document.
For the M.E. degree, a student passes the comprehensive assessment by demonstrating the ability to integrate graduate level coursework into engineering practice. This assessment can be met in one of two ways:

1) The M.E. degree candidate will prepare a 3 page written career planning document describing their past background, educational goals and achievements, how graduate level coursework was/will be integrated into his/her engineering practice, and future plans for career and professional development. The candidate submits this career plan to an advisory committee designated by the graduate director in consultation with the graduate committee and student’s advisor.

-- OR --

2) The M.E. degree candidate will prepare a 3 page written summary of the engineering project performed as part of ECIV 797 – Research in Civil Engineering. The candidate submits this report to an advisory committee designated by the graduate director in consultation with the graduate committee and student’s advisor.

Written portions of the M.E. comprehensive assessment must be submitted to the advisory committee at least 1 month prior to graduation. The passage of the comprehensive assessment will be assessed in the semester the student applies for graduation. An example of the Evaluation Rubric used for the M.E. comprehensive exam is in the Attached Forms List at the end of this document.

The M.E. and M.S. Comprehensive exams remain valid for 2 years after which it must be retaken prior to graduation. The Graduate School must be notified by the graduate director of the student’s academic program of successful completion of the comprehensive examinations.

PUBLICATIONS

A M.S. student must demonstrate the ability to conduct research and publish the findings in peer reviewed journals, conference proceedings and other works. At least 1 journal paper is expected from a M.S. thesis.

THESIS DEFENSE (M.S. Degree)

A M.S. thesis must be successfully defended before the student’s Faculty Advisor and Thesis Committee. The Defense should be no fewer than 30 days before the date of graduation.

Completion of the thesis must be approved by the Thesis Committee and the signatures of the committee members must be obtained on the Thesis Signature Approval (G-TSF) form. The electronic submission of the thesis 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-TSF form to affirm that your thesis follows The Chicago Manual of Style or another style manual endorsed by your program.

The G-TSF with signatures must be delivered to The Graduate School program coordinator who oversees the degree program. The G-TSF is to be submitted to the coordinator in an envelope marked “Personal and Confidential.” Student may hand-deliver the form to The Graduate School program coordinator or
may send it through the mail. The G-TSF must be received by the final-submission deadline in order for
the student to be cleared for graduation. The G-TSF is a degree audit document.

APOGEE students: Due to the nature of the M.S. Comprehensive and Defense, APOGEE students need
to be on-campus in Columbia. This is done in the final semester prior to graduation.

It is the responsibility of the student to secure the location for the Thesis Defense. Defenses are typically
held in the CEE, Department Large Conference Room. See C230 or C229 to inquire about room availability. Students are to provide the Departmental Student Services Coordinator with an abstract,
date, time and location of the thesis defense. This is due one week prior to the defense date and will be
shared with CEE faculty and graduate students and serve as an announcement and/or invitation.

EXAMINATION OUTCOME

The “Evaluation Rubric – M.S. Comprehensive Exam” must be completed by the Faculty Advisor and
each committee member following the M.S. Comprehensive Exam and Thesis Defense. The “Evaluation
Rubric – M.E. Comprehensive Exam” must be completed by the Faculty Advisor and each committee
member following the M.E. Comprehensive Exam and Thesis Defense. These forms are submitted to the
Departmental Student Services Office, C218.

The M.S. candidate must PASS the Comprehensive Exam and Defense to satisfy the requirements of the
Master of Science degree.

The M.E. candidate must PASS the Comprehensive Assessment to satisfy the requirements of the Master
of Engineering degree.

THESIS FORMATTING and SUBMISSION WORKSHOP

The Graduate School offers Electronic Thesis and Dissertation Formatting and Submissions 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 thesis 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.

THESIS SUBMISSION (M.S. Degree)

The thesis 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 thesis 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 Graduate School 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 thesis 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. Additional information on publication and copyright options is available on the website of The Graduate School.

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

APPLICATION FOR DEGREE

All students enrolled in a Master’s 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 will be processed for the following term. The Graduate School forwards the application for degree/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/](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 or 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 the 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. 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 before, during or after fall/spring break. It is the student’s responsibility to schedule a time to meet with his/her advisor during this two week timeframe.
  o Fall advisement – you are advised for spring term only
  o 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).
  o Fall - you will register for spring classes
  o 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 TUITON 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/](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/](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

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

<table>
<thead>
<tr>
<th>Name</th>
<th>Office</th>
<th>Phone Area Code 803</th>
<th>email</th>
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<tbody>
<tr>
<td>Dr. Yeomin Yoon</td>
<td>C107 Environmental</td>
<td>777-8952</td>
<td><a href="mailto:yoony@cec.sc.edu">yoony@cec.sc.edu</a></td>
</tr>
<tr>
<td>Dr. Paul Ziehl</td>
<td>C206 Structures</td>
<td>777-0671</td>
<td><a href="mailto:ziehl@cec.sc.edu">ziehl@cec.sc.edu</a></td>
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</tbody>
</table>

Department FAX (803) 777-0670

## Staff List

<table>
<thead>
<tr>
<th>Name</th>
<th>Office</th>
<th>Phone Area code 803</th>
<th>Email</th>
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</thead>
<tbody>
<tr>
<td>Karen Ammarell</td>
<td>C218</td>
<td>777-9482</td>
<td><a href="mailto:ammarell@cec.sc.edu">ammarell@cec.sc.edu</a></td>
</tr>
<tr>
<td>Tina Anderson</td>
<td>C230</td>
<td>Phone: 777-8304</td>
<td><a href="mailto:andersco@cec.sc.edu">andersco@cec.sc.edu</a></td>
</tr>
<tr>
<td>Patrick Blake</td>
<td>C216 – IT</td>
<td>777-0593</td>
<td><a href="mailto:blakep@mailbox.sc.edu">blakep@mailbox.sc.edu</a></td>
</tr>
<tr>
<td>Kate Fischer</td>
<td>C229 Admin. Assistant</td>
<td>777-3614 Main Number for Dept.</td>
<td><a href="mailto:fischer@cec.sc.edu">fischer@cec.sc.edu</a></td>
</tr>
<tr>
<td>Russell Inglett</td>
<td>B104 Research Specialist</td>
<td>777-8946</td>
<td><a href="mailto:inglettr@cec.sc.edu">inglettr@cec.sc.edu</a></td>
</tr>
<tr>
<td>Anne Kawamoto</td>
<td>C223</td>
<td>777-8318</td>
<td><a href="mailto:kawamoto@cec.sc.edu">kawamoto@cec.sc.edu</a></td>
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For on-line College of Engineering and Computing directory:
http://sc.edu/study/colleges_schools/engineering_and_computing/faculty-staff/index.php

9/2015/ka
### University of South Carolina

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<td>Bursar</td>
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<td>Graduate School</td>
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<td>ID Cards</td>
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<td>777-1709</td>
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<td>Parking Services</td>
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<td>Police</td>
<td>USC on-campus dispatch</td>
<td>777-4215</td>
</tr>
<tr>
<td>Thomas Student Health Center</td>
<td>Immunization Coordinator</td>
<td>777-9511</td>
</tr>
<tr>
<td>Registrar</td>
<td>Information, records, registration and transcripts</td>
<td>777-5555</td>
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<tr>
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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.


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 28 (and copied below) of the ME/MS 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.