

Civil and Environmental Engineering Academic Year 2023- 2024 Graduate Advising Handbook

# **Degrees Offered**

The department offers a professional master's degree (MCEE), a Master of Science degree (MS), and a Doctor of Philosophy degree (Ph.D.). An automatic master's degree is not offered to Ph.D. degree candidates in the department.

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# Introduction

This handbook summarizes the Civil and Environmental Engineering policies and procedures and is updated annually. It is intended to supplement the Rice University <u>General</u> <u>Announcements</u>, which contain graduate school regulations governing students, including deadlines, and additional requirements.

It is the student's responsibility to be familiar with the rules, procedures, and requirements of the Civil and Environmental Engineering Department, the Office of Graduate and Postdoctoral Studies, and Rice University. It is the ultimate responsibility of the student to know and follow all policies and timelines to allow for timely graduation.

# **Graduate Program Committee**

# **Chair (Environmental)**

Prof. Qilin Li

Office: 314 A Lovett Hall

Phone ext. 2046

Email: qilin.li@rice.edu

#### Member

Prof. Jamie Padgett Office: 214 Ryon Lab Phone ext: 2325

Email: Jamie.padgett@rice.edu

#### Member

Kalil Erazo Phone ext: 3798 Email: ke11@rice.edu

# Chair (Civil)

Prof. Satish Nagarajaiah Office: 213 Ryon Lab Phone ext. 6207

Email: satish.nagarajaih@rice.edu

#### Member

Prof. Lauren Stadler Office: 313C Lovett Hall

Phone ext: 3307

Email: lauren.stadler@rice.edu

#### **Administrative Staff**

#### **Program Administrator**

Erica Harris

Office: 204 Ryon Lab Phone ext: 4704 Email: eh63@rice.edu

#### **Department Coordinator**

Caroline Leggett
Office: 206 Ryon Lab
Phone ext: 4216

Email: caroline.leggett@rice.edu

# **Senior Department Administrator**

Liz Hutchinson Office: 207 Ryon Phone ext: 6161

# **Post Award Specialist**

Lilianna Mason Office: 206 Ryon Lab Phone ext: 4699

Email: Lilianna.l.mason@rice.edu



# Administrative Staff continuation

#### **Technician**

Albert Daniel Neumann

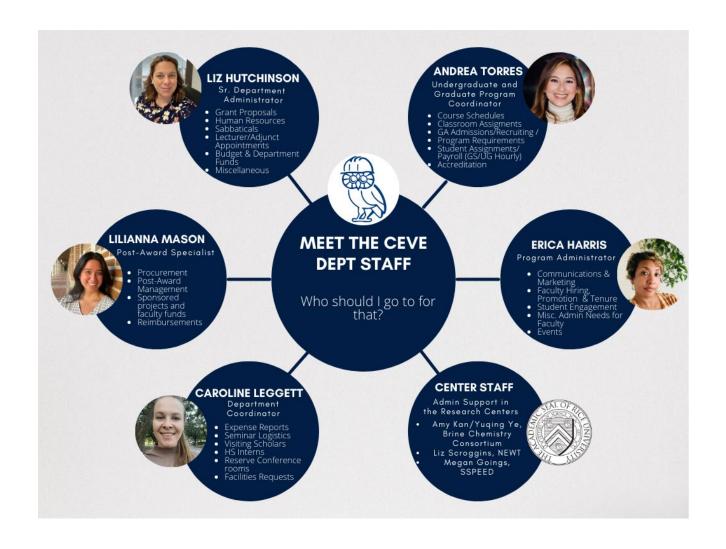
Phone ext: 4335 Email: adn1@rice.edu

#### **Undergraduate/Graduate Administrator**

**Andrea Torres** 

Office: 204 Ryon Lab Phone ext: 2353

Email: atorres@rice.edu



#### CEE – Graduate Student Association

The main purpose of the club is to:

- 1) Foster better professional and personal relationships among students and between students and faculty members.
- 2) Provide a forum for concerns, both professional and personal, about graduate student life.
- 3) Foster professional growth through mentoring, recruitment, and affiliate/internship relationships.

Chair

Priyanka Ali

Email: Priyanka.ali@rice.edu

**Treasurer** 

Marc Laguerre

Email: ml96@rice.edu

**GSA Representative** 

Kooshan Amini

Email: kooshan.amini@rice.edu

**Vice President & Social Chair** 

Kendall Capshaw

Email: kendall.m.capshaw@rice.edu

**Professional Development Chair** 

Raul Rincon

Email: raul.rincon@rice.edu

# **General Requirements**

## **Course Selection**

During the registration period, students should consult with their advisor regarding the registration of courses. The number of research credit hours students register for should agree with the amount of time spent on thesis research. Students should speak with their advisors prior to registering for more than 3 credit hours of research. Students whose advisor holds a primary appointment outside of the CEE department must follow all CEE program requirements.

#### Seminar

M.S. and Ph.D. students are required to enroll in Seminar CEVE 601 (fall), and CEVE 602 (spring) each semester while at Rice. For the M.S. program, up to two credits of the seminar may count toward the total 24 credit hours of approved graduate-level coursework.

MCEE students are required to enroll in one semester of seminar.

## Seminar Policy

All CEVE graduate students are required to take the graduate seminar course every semester while registered at Rice. An exception may be given to students with legitimate excuses (e.g., medical leaves, long field trips, or conducting research at an off-campus site). Requests for exceptions must be made at the beginning of the semester whenever possible.

S/U grades will be given based on attendance and feedback from the advisors. All seminars will be in person this semester. Students are responsible for attending in person and arriving on time for each seminar. **Students are allowed to miss up to 3 departmental seminars without excuse**. A grade of U will be given to any student who fails to meet the above requirements. In addition to our departmental seminars, students are strongly encouraged to attend specialty seminars in the department, as well as seminars, lectures and other scientific activities outside of the department.

#### Registration During Summer Sessions

Currently enrolled Ph.D. and M.S. students should register for summer courses as per normal registration processes and procedures.

# Course Level

Courses must be graduate level (500 or above) to count toward the degree.

#### **Transfer Credit**

Transfer credit is only granted with the endorsement of your advisor and approval by the graduate committee chair. All transfer credit must meet Rice transfer credit guidelines and may not count toward a degree at another institution. When requesting this make sure the graduate administrator is given a

copy of the approved request form. You can find more details at https://registrar.rice.edu/students/transfer-credit/graduate.

#### Semi-Annual Review

M.S. and Ph.D. students must complete a semi-annual review in consultation with their advisor after each semester. The purpose of the review is to ensure that students make adequate academic progress and that the faculty provides timely feedback to the students' academic development.

The review will be a comprehensive evaluation of the student's academic performance including course work, research, professional development, and other relevant activities. It will be conducted at the end of every fall and spring semester. Additional reviews may be done upon request of the faculty. Students will be reviewed based on the following:

- Course work grades. Transcripts including the spring semester grades will be reviewed. For students who are not doing research (e.g., MCEE students), this will be the only document that will be reviewed.
- An annual report submitted by the graduate student to the advisor by May 15. The report will include 1) a summary of academic activities. This includes but is not limited to manuscripts published, submitted or in preparation, conference presentations, awards, professional organization membership, and other research related activities; 2) a one page description of research progress and plans for the coming year. It is very important for the students to set clear and realistic research objectives for the coming year based on consultation with the research advisor and thesis committee. These objectives will be used to judge the student's research progress in the next review.
- An evaluation letter from the research advisor. The letter must be submitted to the Graduate Studies Committee by May 31 in the year when the review is conducted.
- Other materials deemed necessary by the Graduate Studies Committee.

A written assessment of the student's academic progress resulting from the review will be sent to the student before the beginning of the fall semester. Students whose academic progress is judged inadequate by the annual review will receive a warning, and be placed on probationary status. Note that an "Unsatisfactory" grade on Ph.D. or M.S. thesis research will most likely result in an unfavorable review. The student will be given a specific time frame within which improvement must be made to the satisfaction of the research advisor and the Graduate Studies Committee. Failure in demonstrating satisfactory improvement will result in dismissal.

It is strongly recommended that students meet with their advisors at least once per semester to define and adjust research objectives and milestones so that the expectations for research and the criteria for adequate progress are clear.

# **Teaching Service**

Graduate students in the Department of Civil and Environmental Engineering may be required to perform a modest amount of service as a part of the degree program. Typically, this consists of being an

assistant to a professor in an undergraduate/graduate course, and involves grading and /or some tutorial work. It is also meant to provide some exposure to teaching as a part of graduate program.

Teaching Assistance (TA) Guidelines and responsibilities.

- 1. TAs need to spend a maximum of 20 hours per week (half time) on teaching related tasks including preparing and performing tests for a laboratory course, interacting with students during office hours or tutorial sessions, and grading
- 2. TAs (in any capacity) or those who will be TAs in the near future must undergo mandatory training offered by George R. Brown School of Engineering or Center for Teaching Excellence (CTE). CTE offers training at the beginning of the fall semester and only held once a year, it covers topics such as: Institutional Policies (ADA, FERPA, etc.), Grading and Rubrics, Mentoring, Office Hours, and Other Kinds of One-on-One Teaching, and Teaching Tips.

# **Vacation Policy**

Arrangements for holidays and other time off, except for medical and family emergencies, must be made in advance in consultation with the advisor and must follow any funding agency guidelines.

#### **Student Resources**

The Office of Graduate and Postdoctoral Studies offers a list of resources supporting quality of life. Please visit the student life section of the Office of Graduate and Postdoctoral Studies website: http://graduate.rice.edu/studentlife

#### **Professional Development**

Rice University offers several professional development resources to all graduate students. For a complete list of resources please visit

http://gpsdocs.rice.edu/professional development/Rice Grad Resources.pdf.

# CEE GSA for 1st year students

Students are strongly encouraged to get familiar with the CEE Graduate Student Association (GSA). This is an organization comprised of graduate students whose goal is to make the department and the graduate student experiences an unforgettable one. The CEE GSA is an important mechanism for formal and informal communications between CEE student body and the department. It organizes social events for graduate students, participates in important departmental decisions related to students, and is involved in many departmental and university activities.

#### Advisor Change Request

Ph.D. students can change advisor/research group only after documenting the need and purpose. Such a change has to be approved by both former as well as new advisor and the chairperson of the department.

#### Procedure:

- 1. The student should first discuss issues with the current advisor and attempt to resolve any concerns or problems.
- 2. If the student feels that issues are insoluble, he or she is encouraged to request guidance from the graduate committee chairs or the department chair.
- 3. If the student still wishes to switch advisors, the student should speak with a faculty member whose research interests are in line with his or her interests, who is willing to serve as the student's advisor, and who has funding to support the student.
- 4. If the student finds another faculty member willing to serve as his or her advisor, the student should submit a petition to the department chair for approval of the change. This petition must have the endorsement of the new advisor.
- 5. If the department chair approves the switch, the CEE graduate program coordinator will process the paperwork required to change advisors.

# Transferring from Research/Thesis to a Professional Non-Thesis Program

Students who wish to transfer from a thesis program to a professional/non-thesis degree program must petition the department in writing. If approved, students who received tuition waivers while enrolled in the thesis program may be expected to repay some or all of the tuition before their professional degrees are awarded.

# Transferring from Non-Thesis to Research/Thesis

A student who wishes to discontinue a non-thesis program and enter a thesis program would be transferring, and would apply through standard processes. Students who wish to continue graduate study towards another degree after completing a non-thesis degree program must apply for admission into the research/thesis degree program. This is not a transfer; degree programs terminate when the requirements for that degree are completed.

#### Switching from Full-Time to Part-Time Studies

Official request to study part-time should be sent to the department. Petitions should clearly explain the basis for the request and why you are unable to pursue full-time graduate study. The letter should describe the time frame for enrollment plans for the remainder of graduate study, including the date by which all degree requirements (including defense of thesis) will be completed and the expected date of graduation.

# Doctor of Philosophy (Ph.D.) Degree Requirements

The Ph.D. Degree in Civil and Environmental Engineering has two sub-tracks: Civil Engineering (CE) and Environmental Engineering and Sciences (EES). In both cases, to earn a Ph.D. degree, students must meet the following requirements:

- Complete 90 credit hours of approved courses at the 500-level and above past BS (60 credit hours past MS degree) with high standing, including core course requirements stipulated below.
- Complete at least 6 core courses required by the department, specific to relevant track. A
  minimum grade of B- must be achieved for each of these core courses, as well as a minimum
  GPA of 3.0.
- Spend at least four semesters in full-time study at Rice and successfully accomplish the following:
  - Pass a preliminary examination.
  - Pass a qualifying examination on course work, proposed research, and related topics.
  - Complete dissertation indicating an ability to do original and scholarly research.
  - Pass a formal public oral examination on the thesis and related topics.

As part of the advanced degree training, we may also require students to assist the faculty in courses and laboratory instruction.

Course requirements are stipulated to prepare and train students for rigorous and high-quality education, research, and practice. These courses, usually completed within the first two years of graduate school, are designed to train and test the student's aptitude for higher-level thinking, problem-solving, and independent research. Core courses also contribute breadth beyond minimum competency as civil and environmental engineers. The students are expected to strive for breadth and depth in core course selection, by working with their advisor and preliminary examination committee, and ensuring that minimum core competency expectations are met. Reasonable replacements to core courses from the Civil and Environmental tracks will be considered and permitted by the CEE graduate committee when requested by the student with approval of advisor. For example, students may choose core courses from across the tracks when it strengthens their degree program.

# Civil Track

Students focusing on civil, structural engineering, and mechanics, coursework must include one course in each of the following areas: structural mechanics and FEM, structural dynamic systems, earthquake engineering, probabilistic mechanics, and applied mathematics.

Students should take at least 6 of the following 13 courses:

CEVE 500 (S) Advanced Mechanics of Materials

CEVE 524 (F) Time-Dependent System Reliability Methods and Applications \*

CEVE 527 (F) Physics Guided Machine Learning & Data Driven Modeling FEM \*

CEVE 531 (F) Reinforced Concrete Buildings

CEVE 541 (S) Structural Steel Buildings \*

CEVE 560 (F) Bridge Engineering & Extreme Events \*

CEVE 562 (F) Infrastructure Resilience to Multiple Hazards \*

CEVE 576 (S) Structural Dynamic Systems \*

CEVE 578 (F) Earthquake Engineering \*

CEVE 592 (F) Modeling and Analysis of Networked Systems \*

CEVE 596 (S) System Identification of Dynamic Systems with Machine Learning\*

CEVE 678 (F) Applied Stochastic Mechanics \*

CEVE 679 (F) Applied Monte Carlo Analysis \*

\*Offered every two years

#### **Environmental Track**

Students focusing in environmental engineering, students are strongly encouraged to take a well-balanced core curriculum that covers courses in at least 3 of the following 5 areas: environmental chemistry, water treatment, hydrology, air quality, and microbiological processes

Students should take at least 6 of the following 9 courses:

CEVE 501 (F) Environmental Chemistry

CEVE 509 (S) Hydrology and Water Resources Engineering

CEVE 511 (F) Atmospheric Chem & Climate

CEVE 518 (S) Environmental Hydrogeology

CEVE 521 (S) Climate Risk Management

CEVE 526 (F) Smart Materials for the Environment

CEVE 534 (F) Fate and Transport of Contaminants in the Environment

CEVE 535 (S) Physical Chemical Processes for Water Quality Control

CEVE 536 (S) Environmental Biotechnology and Bioremediation

CEVE 543 (F) Data-Driven Climate Hazard

CEVE 544 (F) Environmental Microbiology and Microbial Ecology

CEVE 550 (S) Environmental Organic Chemistry

Substitutions will be considered when a core course is not offered, or under special circumstances related to the professional goals of the student. Substitutions will be considered on a case-by-case basis and will require approval by the faculty. Potential substitute courses include:

CEVE 520 (F) Environmental Remediation Restoration

CEVE 592 (F) Modeling and Analysis of Networked Systems \*

\* Offered every two years

#### **Preliminary Examination**

The goal of the Preliminary Exam is to evaluate students' readiness for creative, rigorous, and independent research at the Ph.D. level. The exam tests the general technical background of the students in civil engineering, environmental sciences, and engineering, as well as their critical thinking,

synthesis, and communication skills (oral and written). This exam will be in the form of writing and presenting a research proposal. The preliminary exam committee is comprised of the student's primary advisor and a committee formed as follows.

First-year CEE Ph.D. students will each be invited to write a short proposal that demonstrates creativity and critical thinking skills, on a topic within the student's research domain but not directly related to their ongoing research or anticipated Ph.D. dissertation. This topic will be selected by the examination committee in consultation with the student's advisor. The student will have two weeks to prepare this proposal and aim to present it during the week prior to commencement. A 20-min presentation will be followed by questions from the examination committee, consisting of three faculty members including their advisor. The questions may extend beyond the proposal theme to ensure core competency skills and advise students of potential areas that require strengthening (e.g., through future course work). The exam will be documented using the Ph.D. prelim evaluation sheet, please see Graduate Administrator.

Students will receive the topic from their advisor at least 2 weeks before the scheduled exam (students should follow up with their advisor if it was not received 2 weeks before the scheduled exam); in addition, students are required to submit a copy of any written documents to the committee and Andrea Torres 48 hours before the exam.

The exam can last anywhere between 60-90 minutes unless the committee decides to exceed this time to help with its deliberation. The committee will provide immediate feedback to the student at the end of his/her exam period. Students are requested to submit a copy of their critical review and any prepared slides to the Graduate Studies Program Administrator for record-keeping.

Students who fail the preliminary exam either fully or partially can petition for retaking the exam. Petitions will be considered on a case-by-case basis by the graduate committee and the department chair. All pass/fail decisions will be approved by the preliminary exam committee, the graduate committee, and the Department Chair. Students who fail the preliminary exam twice will not be allowed to continue in the Ph.D. program.

A student who passes the written and oral part of the preliminary exam becomes eligible for taking the qualifying exam.

#### PE Format

Brevity is appreciated (e.g., 10-page limit including figures but not references, 12-point font, 1-inch margins, 1.5 spacing). The proposals should consider the following evaluation criteria:

- 1. Intellectual merit and originality of overall proposal.
- 2. Evidence of broad understanding of topic or problem they aim to solve (i.e., the **Need** for proposed research), and critical knowledge gaps and barriers.
- 3. **Approach** (including hypothesis and scientific basis)
- 4. Feasibility and expected **Benefits** (including broader impacts).
- 5. Consideration of **Competition** and alternatives, with proposed benchmarking as appropriate (see NABC to define a value proposition, next page).

The following proposal format is suggested:

- A. Introduction (Include problem statement and motivation)
- B. Objective, Hypothesis and Significance
- C. Background (Brief but critical literature review that shows you can discern critical gaps directly relevant to your proposal)
- D. Approach and Technical Research Plan (Should be credible and feasible. You may include original graphics and tables of experimental design with controls as appropriate).
- E. Expected Benefits and Deliverables
- F. References

An NABC comprises the four fundamentals that define a project's value proposition (Use as appropriate in your proposal):

- <u>Need:</u> What are our stakeholders or societal needs? What are the critical questions you need to
  answer and why are they important? The need should relate to an important and specific
  challenge or opportunity that could be addressed by science and technology. The need should
  be significant enough to merit the necessary investment for research and development time.
- Approach: What is our proposed solution (or hypothesis) to address the specific need? Draw it, simulate it or make a mockup to help convey your vision. As the approach develops through iterations, it becomes a full proposal, which can include deliverables and a timetable.
- <u>Benefits</u>: What are the client (or stakeholder) benefits of our approach? What are the broader impacts? Each approach to a client's need results in unique client benefits, such as low cost, high performance or quick response. Success requires that the benefits be quantitative and substantially better not just different.
- <u>Competition/alternatives:</u> Why are our solutions significantly better than the status quo or competing alternatives? We must clarify why our solution represents the best value. To do this, we must understand our competition and our client's alternatives, and sometimes do direct comparisons with appropriate metrics (i.e., "benchmarking"). Our answer should be short and memorable.

See https://youtu.be/iHiLAJGDGt4

#### Ph.D. Thesis Committee

After successfully passing the preliminary exam students should form a doctoral committee. A thesis committee is composed of at least three members. Two, including the committee chair, must be members of the CEE faculty; in doctoral thesis committees, one member must have his or her primary appointment in another department within the university. At least three members of the committee must meet one of the following requirements:

• Tenured or tenure-track members of the Rice faculty

- Research faculty holding the rank of faculty fellow, senior faculty fellow, or distinguished faculty fellow
- Faculty who have been certified as thesis committee members by the dean of graduate and postdoctoral studies

The committee chair need not be the thesis director. The chair, however, must be either a tenured or a tenure-track member of the CEE department. Additional members of the committee, who may or may not meet the above criteria, may be selected with the approval of the department chair, these would be in addition to the three required members.

In cases where the student and the major advisor disagree on the selection of thesis committee members, the student may file a petition to the department's Graduate Academic Affairs Committee. Based on its independent evaluation, the Graduate Academic Affairs committee will approve the thesis committee before the candidacy form may be submitted to the Office of Graduate and Postdoc Studies.

Regular Thesis Committee Meetings should be held each semester thereafter forming a thesis committee, students should consult with the chair and members of their thesis committee about the nature and progress of research as the work evolves.

# Qualifying Exam (Thesis Proposal)

The qualifying exam must be completed before petitioning for approval of candidacy. Ph.D. students must be approved for candidacy before the beginning of the ninth semester of their residency at Rice. The qualifying examination will be administered by the doctoral thesis committee. The committee will evaluate the student's preparation for the proposed research and identifies any areas requiring additional course work or study. The qualifying exam must be scheduled at least six months before the final defense. Students who fail the qualifying examination will not be granted Ph.D. candidacy. Petition to retake the exam will be considered on a case-by-case basis by the department chair, who will consider the advice of both the Thesis Committee and the Graduate Studies Committee.

To complete the qualifying exam, students must:

- Form a thesis committee. Ph.D. students are required to form a doctoral thesis committee as soon as the preliminary exam is passed.
- Prepare a thesis proposal. The thesis proposal should contain reasonably detailed preliminary work and a proposed research approach
- Defend thesis proposal during a meeting with the thesis committee. The qualifying exam/ thesis proposal defense must be scheduled at least six months before the final defense.

The thesis proposal defense will be documented using the **Evaluation of Ph.D. Proposal form**. This will be used to determine the student's ability to demonstrate the acquired advanced knowledge of the principles of civil and environmental engineering and apply them to advanced technical problems, ability

to conduct independent research, and ability to demonstrate professional written and oral communication skills. Students should make sure to send their advisor and graduate administrator a copy of the proposal at least two weeks before the scheduled defense.

# Thesis Proposal Format

The content and length of the Ph.D. thesis proposal must be finalized in agreement with the advisor. Students actively writing a thesis proposal/thesis are strongly encouraged to register for ENGI 600

Written and Oral Communication Seminar for Engineering Graduate Students (offered in spring and fall). This highly interactive seminar emphasizes how to explain work clearly to a wide range of audiences, both technical and those outside the area of expertise; all writing and speaking assignments are based on students' own research and will receive extensive feedback.

## Ph.D. Petition for Approval of Candidacy

Immediately following successful completion of the thesis proposal, students must submit a petition for Approval of Candidacy for a Doctoral Degree form found at <a href="https://gpsdocs.rice.edu/forms/DoctoralCandidacyPetitionForm.pdf">https://gpsdocs.rice.edu/forms/DoctoralCandidacyPetitionForm.pdf</a>. In thesis programs, the attainment of candidacy marks the completion of all requirements for the degree other than those related to research leading to the writing, submission, and defense of the thesis. Requirements include (a)

of candidacy marks the completion of all requirements for the degree other than those related to research leading to the writing, submission, and defense of the thesis. Requirements include (a) completing required course work, (b) passing the preliminary exam, which demonstrates your solid foundation in civil and environmental engineering at the graduate level (c) passing the qualifying exam, which demonstrates the ability for effective oral and written communication, and shown the ability to carry on scholarly work in his/her subject area.

- ➤ Ph.D. students must be approved for candidacy before the beginning of the ninth semester of their residency at Rice.
- Each student's individualized time boundaries are available in Esther. Students who are approaching or who have passed their deadline for candidacy, and who have not met all requirements for candidacy must submit an extension of candidacy request. Extensions are approved on a case-by-case basis by the Office of Graduate and Postdoctoral Studies.
- The Office of Graduate & Postdoctoral Studies will impose a \$125 reinstatement fee on students who are allowed to continue but have exceeded their time boundaries without prior approval.

All Ph.D. students must submit a petition for approval of candidacy before their time boundary deadline or before the graduation deadline, whichever comes first. Petitions should be submitted to atorres@rice.edu. Once candidacy has been approved by the Dean of Graduate and Postdoctoral Studies, students can schedule, in coordination with his or her research advisor, a public thesis defense.

## Request for extension of time to candidacy

Each student's individualized time boundaries are available in Esther. Students who are approaching or who have passed their deadline for candidacy, and who have not met all requirements for candidacy must submit a Petition to Extend Time Boundary for Approval of Candidacy request. Extensions are

approved on a case-by-case basis by the Office of Graduate and Postdoctoral Studies. Request for extension of time to candidacy can be found on the Graduate and Postdoctoral website http://graduate.rice.edu/forms. Petitions should be filled out in consultation with your advisor and submitted to <a href="mailto:atorres@rice.edu">atorres@rice.edu</a> for processing.

#### Ph.D. Defense

Candidates who pass the qualifying exam are required to write a detailed Ph.D. thesis and schedule the Ph.D. defense under the guidance of their advisor and doctoral committee. *The content and length of the Ph.D. thesis dissertation must be finalized in agreement with the advisor.* The Ph.D. thesis must be submitted to the doctoral committee and the department at least two weeks prior to the defense.

The Ph.D. defense must be scheduled according to the Rice University graduate school requirements (at least fourteen days prior to the date of the defense). Defense announcements should be submitted to the Office of Graduate and Postdoctoral Studies by filling out an online form at <a href="http://events.rice.edu/rgs/">http://events.rice.edu/rgs/</a>. Please refer to the Office of Graduate and Postdoctoral Studies website <a href="http://graduate.rice.edu/thesis/">http://graduate.rice.edu/thesis/</a> for specific information. Additionally, you should send an electronic copy of your thesis to your committee and the graduate administrator at least fourteen days prior to the defense.

The candidate will make an oral presentation for approximately an hour; the presentation will be open to the public. Followed by a question and answer session by the general audience and a closed-door question and answer session by the doctoral committee. The candidates who successfully defend their Ph.D. will be awarded the degree of Doctor of Philosophy.

The thesis defense will be documented using the "Evaluation of Ph.D. Defense form". This will be used to determine the student's ability to demonstrate the acquired advanced knowledge of the principles of civil and environmental engineering and apply them to advanced technical problems, ability to conduct independent research, and ability to demonstrate professional written and oral communication skills.

#### **Acceptance of Thesis**

In the course of the examination, the thesis committee members may recommend revisions or additions, which must be incorporated into the final thesis. The final thesis must be signed by all committee members. No later than six months from the date of the examination, candidates who successfully passed the oral examination in defense of their thesis must submit their thesis to the Office of Graduate and Postdoctoral Studies. (Refer to the Graduate and Postdoctoral Studies website <a href="http://graduate.rice.edu/thesis/">http://graduate.rice.edu/thesis/</a> for specific instructions on how to submit the thesis.)

If the thesis is not ready for final signatures by the end of the six-month period, the "pass" may be revoked and an additional oral defense will need to be scheduled. Application for an extension without reexamination must be made by the candidate with the unanimous support of the thesis committee, endorsed by the school dean, and approved by the Office of Graduate and Postdoctoral Studies.

Extensions of this six-month period for completion without reexamination will be granted only in rare circumstances.

# Ph.D. Suggested Timeline

Those admitted after B.S. may follow the M.S. student's guidelines initially and then switch to the following after completion of the M.S.:

- First year: Course work, begin research under the direction of advisor as deemed appropriate
- End of the first year: Take the preliminary exam
- First semester, second-year: Form a committee and consult with the committee
- Each semester thereafter (at a minimum) consult with the committee; meet if necessary (at the discretion of the committee chair)
  - Ensure that you submit the fall/spring semester progress reports to the department graduate committee with the approval of your advisor
- Third or fourth year: Write and defend the proposal in the Ph.D. qualifying examination (this should be at least six months before the final defense) followed by petitioning for candidacy
- Final semester: Defend and submit the dissertation

# Master of Science Requirements

To earn an MS degree, students must:

- Complete a minimum of 30 credit hours at the graduate level or above to satisfy degree requirements
- Complete a minimum of 24 credit hours from approved graduate-level courses and 6 credit hours of thesis research. Students must obtain a minimum GPA of 3.00 with a minimum grade of B- (2.67 grade points) in each core course. While maintaining a minimum average GPA of 3.0 [and at least a minimum grade of B].
- Select a thesis committee according to department requirements and conduct original research in consultation with the committee.
- Present and defend in oral examination an approved research thesis. Students take the oral
  exam only after the committee determines the thesis to be in a written format acceptable for
  public defense. Normally, students take two academic years and the intervening summer to
  complete the degree.

Students intending to extend their studies into the PhD degree program should note that the department does not grant an automatic (candidacy) MS degree to candidates who have not written a satisfactory master's thesis.

Core Courses contribute to breadth, depth, and minimum competency as civil and environmental engineers. Students should adhere to the following course requirements. **Note that up to two credits of seminar may count toward the total 24 credit hours of approved graduate level courses.** 

#### Civil Track

Students focusing on civil, structural engineering and mechanics, coursework must include at least one course in each of the following areas: structural mechanics and FEM, structural dynamic systems, earthquake engineering, probabilistic mechanics, and applied mathematics. Comparable coursework completed previously may be substituted for these core courses

#### **Environmental Track**

Students focusing on environmental engineering, coursework must include at least one course in each of the following areas: environmental chemistry, water treatment, hydrology, and air quality. Comparable coursework completed previously may be substituted for these core courses.

# M.S. Petition for Approval of Candidacy

Master's students must be approved for candidacy before the beginning of the fifth semester of their residency at Rice, only then will students defend their dissertation. Students should fill out the Petition for Approval of Candidacy for Masters Degree found at

https://gpsdocs.rice.edu/forms/MastersCandidacyPetitionForm.pdf. Students' individualized time boundaries are available in Esther. Students must complete (a) required coursework (b) ability to

demonstrate effective oral and written communication, and show the ability to carry on scholarly work in his/her subject area.

# Request for extension of time to candidacy

Each student's individualized time boundaries are available in Esther. Students who are approaching or who have passed their deadline for candidacy, and who have not met all requirements for candidacy must submit a Petition to Extend Time Boundary for Approval of Candidacy request. Extensions are approved on a case-by-case basis by the Office of Graduate and Postdoctoral Studies. Request for extension of time to candidacy can be found on the Graduate and Postdoctoral website http://graduate.rice.edu/forms. Petitions should be filled out in consultation with your advisor and submitted to <a href="mailto:atorres@rice.edu">atorres@rice.edu</a> for processing.

#### M.S. Thesis Committee

An M.S. thesis committee should be formed during the first semester of the second year. An M.S. thesis committee is composed of at least three members. Two members, including the committee chair, must be members of the CEE faculty with their primary appointment in the CEE department; you may have all three members within the CEE faculty for M.S. committees ONLY. At least three members of the committee must meet one of the following requirements:

- Tenured or tenure-track members of the Rice faculty
- Research faculty holding the rank of faculty fellow, senior faculty fellow, or distinguished faculty fellow
- Faculty who have been certified as thesis committee members by the dean of graduate and postdoctoral studies

The committee chair need not be the thesis director. The chair, however, must be either a tenured or a tenure-track member of the CEE department. Additional members of the committee, who may or may not meet the above criteria, may be selected with the approval of the department chair. These would be in addition to the three required members.

In cases where the student and the major advisor disagree on the selection of thesis committee members, the student may file a petition to the department's Graduate Academic Affairs Committee. Based on its independent evaluation, the Graduate Academic Affairs committee will approve the thesis committee before the candidacy form may be submitted to the Office of Graduate and Postdoc Studies.

Regular Thesis Committee Meetings should be held each semester after forming a thesis committee, students should consult with the chair and members of their thesis committee about the nature and progress of research as the work evolves. Students actively writing a thesis are strongly encouraged to register for ENGI 600 Written and Oral Communication Seminar for Engineering Graduate Students (offered in spring and fall). This highly interactive seminar emphasizes how to explain work clearly to a

wide range of audiences, both technical and those outside the area of expertise; all writing and speaking assignments are based on students' own research and will receive extensive feedback.

#### M.S. Defense

Master's students must defend their theses before the end of the eighth semester of their residency at Rice. Candidates are required to write a detailed M.S. thesis and schedule the M.S. defense under the guidance of their advisor and master's committee. The content and length of the M.S. thesis dissertation must be finalized in agreement with the advisor. The M.S. thesis must be submitted to the master's committee and the department at least one week prior to the defense.

The M.S. defense must be scheduled and announced to the public according to the Rice University graduate school requirements (at least one week prior to the date of the defense). Defense announcements should be submitted to the Office of Graduate and Postdoctoral Studies by filling out the following form: http://events.rice.edu/rgs/. Please refer to the Office of Graduate and Postdoctoral Studies website http://graduate.rice.edu/thesis/ for specific information.

The thesis defense should be documented using the "Evaluation of MS Defense form". This will be used to determine the student's ability to demonstrate the acquired advanced knowledge of the principles of civil and environmental engineering and apply them to advanced technical problems, ability to conduct independent research, and ability to demonstrate professional written and oral communication skills.

# Acceptance of Thesis

The completed thesis must be submitted in either final or advanced draft form to the members of the thesis committee at least two weeks before the oral examination. A copy of the completed thesis must also be submitted to the department at least two weeks before the oral examination. The department copy may be submitted electronically to <a href="mailto:atorres@rice.edu">atorres@rice.edu</a>.

In the course of the examination, the thesis committee members may recommend revisions or additions, which must be incorporated into the final thesis. The final thesis must be signed by all committee members. No later than six months from the date of the examination, candidates who successfully passed the oral examination in defense of their thesis must submit their thesis to the Office of Graduate and Postdoctoral Studies. Please refer to the Graduate and Postdoctoral Studies website http://graduate.rice.edu/thesis/ for specific instructions regarding how to submit the thesis. If the thesis is not ready for final signatures by the end of the six-month period, the "pass" may be revoked and an additional oral defense will need to be scheduled. Application for an extension without reexamination must be made by the candidate with the unanimous support of the thesis committee, endorsed by the school dean, and approved by the Office of Graduate and Postdoctoral Studies. Extensions of this six-month period for completion without reexamination will be granted only in rare circumstances.



# M.S. Suggested Timeline

- First year: Course work, begin research under the direction of advisor as deemed appropriate
- End of the first year (for Civil Eng. Students after 1.5 years): Take the preliminary exam if intending to continue for a Ph.D. in the ENVE program.
- First semester, second-year: Form a committee and consult with the committee; meet if
  necessary (at the discretion of the committee chair) followed by a petition for candidacy
  Second year, the second semester: Write and defend the thesis

# Master of Civil and Environmental Engineering (MCEE)

The Master of Civil and Environmental Engineering (MCEE) is a professional non-thesis degree requiring 30 semester hours of approved course work. Students who have a BS or BA degree in any field of engineering or related study may apply. Students will complete 30 hours of graduate level courses (24 semester hours must be at Rice University) in our Civil Engineering or Environmental Engineering subtracks including the required core courses and a final project.

- Complete a minimum of 30 credit hours at the graduate level or above to satisfy degree requirements, and coursework specific to the relevant track, as outlined below.
- A minimum of 24 graduate semester credit hours must be taken at Rice University
- A minimum residency enrollment of one fall or spring semester at Rice University
- A minimum of one graduate seminar (CEVE 601 or CEVE 602)
- A final project (CEVE 590)
  - First semester, students should speak to a faculty member whose research interests are in line with his or her professional goal, and who is willing to serve as the advisor on the student project.
  - Second semester or semester in which the final project will be completed, students
    must register for CEVE 590 under their project advisor and are required to meet with
    their advisor to discuss final project details and timeline by the end of the first week of
    class and each week thereafter as needed. Additionally, students are required to
    undergo training with the Center for Academic and Professional Communication (CAPC).
    A timeline is below.
    - By week 10, set up a meeting with CAPC for training on writing and presenting a final project
    - By week 13, submit the first draft to CAPC
    - By week 14, submit the final draft to CAPC
    - Week 15, last meeting with CAPC
    - Final project presentation and submission completed by the last day of class. Note that students should seek a second faculty member to serve as an evaluator in addition to your project advisor.

Graduate courses from other departments might count towards the MCEE degree, but need prior approval by CEE Graduate Committee Chairs. Depending on their background, some students may need to fulfill pre-requisites or take remedial engineering courses in addition to the required 30 semester hours to earn the MCEE degree. Students can transfer up to 6 credits of graduate-level courses equivalent to the required courses with proper approval. All professional master's students must maintain a minimum average GPA of 3.0.

#### Civil Track

For the Civil Engineering track, all students must complete 10 courses (30 credit hours) as listed below to satisfy the area of specialization in Civil Engineering.

Core Requirements: Students must complete 7 courses, including seminar (19 credit hours) from the following:

CEVE 500 (F) Advanced Mechanics of Materials [3 credit hours]

CEVE 524 (F) Time Dependent System Reliability Methods [3 credit hours]

CEVE 527 (F) Physics Guided Machine Learning & Data Driven Modeling FEM \* [3 credit hours]

CEVE 531 (F) Reinforced Concrete Buildings \* [3 credit hours]

CEVE 541 (S) Structural Steel Buildings \* [3 credit hours]

CEVE 554 (F) Computational Fluid Mechanics [3 credit hours]

CEVE 560 (F) Bridge Engineering and Extreme Events \* [3 credit hours]

CEVE 562 (F) Infrastructure Resilience to Multiple Hazards \*

CEVE 571 (F) Soil Mechanics and Foundations [3 credit hours]

CEVE 576 (S) Structural Dynamic Systems \* [3 credit hours]

CEVE 578 (F) Earthquake Engineering \* [3 credit hours]

CEVE 592 (F) Modeling and Analysis of Networked Systems \* [3 credit hours]

CEVE 596 (S) System Identification of Dynamic Systems with Machine Learning \* [3 credit hours]

CEVE 601 (F) Seminar [1 credit hour] or CEVE 602 (S) [1 credit hour]

CEVE 678 (F) Applied Stochastic Mechanics \* [3 credit hours]

CEVE 679 (F) Applied Monte Carlo Analysis \* [3 credit hours]

Electives - To fulfill the remaining requirements for the area of specialization in Civil Engineering, students must complete 3 courses (9 credit hours) as listed below.

A. Directed Civil Engineering Electives - Students must complete a total of 2 courses (6 credit hours) from the Core Requirements or from the following:

CMOR 522 (F) Numerical Analysis \* [3 credit hours]

CEVE 517 (S) Finite Element Methods [3 credit hours]

CEVE 555 (S) Numerical Methods for Partial Differential Equations [3 credit hours]

MECH 502 (S) Vibrations \* [3 credit hours]

RCEL 506 (S) Applied Statistics and Data Science for Engineering Leaders [3 credit hours]

B. Professional Development Electives - Students must complete 1 course (3 credit hours) from the following:

ANTH 532 (S) The Social Life of Clean Energy \* [3 credit hours]

CEVE 505 Engineering Economics and Project Management

CEVE 506 Global Environmental Law and Sustainable Development

CEVE 507 (S) Energy and the Environment \* [3 credit hours]

CEVE 528 (S/F) Engineering Economics \* [3 credit hours]

CEVE 529 (F) Ethics and Engineering Leadership

ECON 601 (F) Energy Economics (pre-req. ECON 301 OR ECON 370) \* [4 credit hours]

ENGI 501 Workplace Communication for Professional Master's Students in Engineering

NSCI 511 (F) Science Policy and Ethics \* [3 credit hours]

NSCI 610 (F) Management for Science/Engineering \* [3 credit hours]

RCEL 501(S) Engineering Management & Leadership Theory and Application [3 credit hours]

RCEL 502 (S) Engineering Project Management [3 credit hours]

RCEL 503 (F) Engineering Product Management in Industry 4.0 [3 credit hours]

RCEL 504 (S) Ethical-Technical Leadership [3 credit hours]

RCEL 505 (S) Engineering Economics for Leaders [3 credit hours]

\* Offered every two years

## **Environmental Track**

For the Sustainable Environmental Engineering and Design track, all students must complete a total of 10 courses (30 credit hours) as listed below to satisfy the area of specialization in Sustainable and Environmental and Design.

Core Requirements<sup>†</sup> - Students must complete 7 courses, including seminar (19 credit hours) from the following courses (19 credit hours):

CEVE 502 (F) Sustainable Engineering Design [3 credit hours]

CEVE 509 (S) Hydrology and Water Resources Engineering [3 credit hours]

CEVE 511 (F) Atmospheric Chem & Climate [3 credit hours]

CEVE 518 (F) Environmental Hydrogeology [3 credit hours]

CEVE 534 (F) Fate and Transport of Contaminants in the Environment [3 credit hours]

CEVE 535 (S) Physical Chemical Processes for Water Quality Control

CEVE 536 (S) Environmental Biotechnology [3 credit hours]

CEVE 543 (S) Environmental Data Science [3 credit hours]

CEVE 550 (S) Environmental Organic Chemistry [3 credit hours]

CEVE 601 (F) or CEVE 602 (S) Professional Seminar [1 credit hour]

Electives - To fulfill the remaining Sustainable and Environmental Engineering and Design requirements, students must complete 3 additional courses (9 credit hours) from the following:

A. Engineering Science and Technology, choose up to 2 (6 credit hours) from the following:

CEVE 501 (F) Environmental Chemistry (w/o lab) [3 credit hours]

CEVE 510 (F) Principles of Environmental Engineering [3 credit hours]

CEVE 516 Fundamentals of Groundwater Flow [3 credit hours]

CEVE 520 (F) Environmental Remediation Restoration \* [3 credit hours]

CEVE 523 Applies Sustainable Planning and Design [3 credit hours]

CEVE 526 (F) Smart Materials for the Environment [3 credit hours]

CEVE 544 (F) Environmental Microbiology and Microbial Ecology [3 credit hours]

CEVE 592 (F) Modeling and Analysis of Networked Systems \* [3 credit hours]

CEVE 684 Environmental Risk Assessment and Human Health

EEPS 584 Data Science Environmental and Geosciences

EEPS 632 Quantitative Hydrogeology

RCEL 506 Applied Statistics and Data Science for Engineering Leaders

STAT 685 Environmental Statistics and Decision Making

B. Sustainable Resource Management, choose up to 1 (3 credit hours):

ANTH 532 The Social Life of Clean Energy \* [3 credit hours]

CEVE 505 Engineering Economics and Project Management

CEVE 506 Intro to Environmental Law [3 credit hours]

CEVE 507 (S) Energy and the Environment \* [3 credit hours]

CEVE 528 (S/F) Engineering Economics \* [3 credit hours]

CEVE 529 (F) Engineering Leadership and Ethics \* [3 credit hours]

BIOS 580 (F) Sustainable Development and Reporting [3 credit hours]

ECON 601 (F) Energy Economics (pre-requisites ECON 301 OR ECON 370) \* [3 credit hours]

ENGI 501 Workplace Communication [3 credit hours]

NSCI 511 (S) Science Policy and Ethics \* [3 credit hours]

NSCI 610 (F) Management for Science/Engineering \* [3 credit hours]

RCEL 501(S) Engineering Management & Leadership Theory and Application [3 credit hours]

RCEL 502 (S) Engineering Project Management [3 credit hours]

RCEL 503 (F) Engineering Product Management in Industry 4.0 [3 credit hours]

RCEL 504 (S) Ethical-Technical Leadership [3 credit hours]

RCEL 505 (S) Engineering Economics [3 credit hours]

† If a required course or equivalent has been taken, it can be replaced with an Engineering Science and Technology elective.

# **MCEE Final Project**

All MCEE students must complete a 2-credit final project with a faculty member in the CEE department with an additional faculty member present. Through the final project, MCEE students must demonstrate professional written and oral communication skills:

- A. Students write-well organized, coherent papers with few grammatical errors
- B. Students demonstrate ability to describe scientific issues and techniques in writing and in presentation
- C. Students deliver a professional presentation on par with a solid conference presentation
- D. Student responses to questions demonstrate a facility with the issues and techniques immediately relevant to the topic.

Note: MCEE students are required to undergo training with the CENTER FOR ACADEMIC AND PROFESSIONAL COMMUNICATION (CAPC) on the writing and presentation of the final project. Fall and

<sup>\*</sup> Offered every two years

spring final project submission requirements: the student should set up an initial meeting with CAPC by week 10; students should submit the first draft to CAPC by week 13; students should submit the final draft to CAPC by week 14; students should set up the last meeting by week 15. The oral presentation and submission of the final MCEE report should be completed by the last day of classes. Consult with Andrea Torres for further details.

The final project presentation should be documented using the "MCEE Evaluation of Presentation form". This will be used to determine the student's ability to demonstrate a solid foundation in civil and environmental engineering at the graduate level and the ability to demonstrate professional written and oral communication skills. Forms should be requested by emailing atorres@rice.edu, when requesting the form send a copy of your report/slides for inclusion in your student record. After the presentation is complete, the completed MCEE evaluation of presentation rubrics form should be submitted to the graduate program coordinator Andrea Torres.

# **Academic Regulations and Good Standing**

Graduate students must meet University deadlines, residency, and course or grade requirements to remain in good standing and to graduate from the university.

# **Good Standing**

Students must minimum candidacy deadlines, department requirements, and course or grade requirements in order to remain in good standing and to graduate from the university.

#### **Residency Requirements**

Ph.D. students must complete at least four full fall and/or spring semesters in full-time study at Rice University. The minimum enrollment requirement for thesis master's programs is one fall or spring semester of full-time graduate study. For non-thesis master's programs, the minimum enrollment is one fall or spring semester in full-time or part-time graduate study.

#### Time to Degree

PhD students are required to complete their program, including thesis defense, within 10 years of initial enrollment in the degree program. All master's students are required to complete their program, including thesis defense, within five years of initial enrollment. In both cases, students have a limit of six additional months from the date of defense to submit their theses to the Office of Graduate and Postdoctoral Studies. These time boundaries include any period in which the student was not enrolled or enrolled part-time, for whatever reason. Failure to meet any university time to degree deadline may result in the student not being able to continue in their degree program.

# Application for Degree and Degree Conferral

Students are responsible for making certain that their plan of study meets all degree and program requirements in their field of study.

To graduate from Rice University, all students must submit an Application for Degree Form available in ESTHER. This form is required for all students who plan to complete their degree requirements at the end of a fall, spring, or summer semester. A late fee will be assessed for applying after the deadline (please consult the semester-specific Academic Calendar for deadlines). Upon completion of degree requirements, degrees are approved by the faculty and conferred in December, May, and August. Fall and Spring degree recipients may then participate in the annual commencement ceremony, celebrated each year after the conclusion of the spring semester. Summer degree recipients have the option of participating in the following year's annual commencement ceremony.

#### Standard of Conduct

Students are expected to live up to the high standards Rice sets for its community members, as described in the <u>Code of Student Conduct</u>. Graduate students should be in compliance with the Code of Student Conduct at all times and not have holds from Student Judicial Programs or other offices.

# Guidelines for Dismissals, Petitions, Appeals, Grievances, and Problem Resolution

Dismissal. Dismissal from the program can result from 1) failure in meeting any university or departmental requirements, 2) a disciplinary violation resulting in a University sanction, and 3) inadequate academic progress.

A student who is failing to meet departmental or university requirements, such as failing to meet grade requirements, failing to pass required examinations by the required time, or failing to advance to candidacy or defend her/his thesis within the required time, is subject to dismissal without further warning.

When a student is judged not to be making adequate academic progress -particularly research - based on the annual performance review or additional reviews conducted by the research advisor, he or she will be warned in writing of the possibility of dismissal and be placed on probationary status. Specific requirements for improvement within a specified time period will be made. If the student does not meet the stated requirement within the time frame specified, he or she will be dismissed by the graduate program. A written notice of dismissal will be sent to the student 15 days before the date of dismissal.

Reduction and termination of financial support. Active participation in required research activities is a basic condition for continued financial support. When a graduate student is placed on probationary status due to inadequate academic progress, the research advisor may decide to reduce or suspend the financial support to the student. Student who are absent from required research activities for continuous two weeks without permission and without mitigating circumstances may be subject to termination of financial support. In addition, they will be judged to be not making adequate academic progress. Thus, if absences have to occur, they must be pre-arranged with the student's advisor, except for medical and family emergencies, in which cases timely notification is required.

Petitions and Appeals. Graduate students may petition for exceptions to academic requirements, regulations, and judgments. A petition regarding University requirements, regulations and judgments must be submitted to the Office of Graduate and Postdoctoral Studies; such a petition must be accompanied by a recommendation from the Department. When the Department's recommendation is negative, or when the petition requests a major exception, the Office of Graduate and Postdoctoral Studies may also obtain the recommendation of the School of Engineering (when relevant) and the Graduate Council.

A petition regarding departmental requirements, regulations, or judgments must be submitted to the Department Chair. Students petitioning must provide documents that support or justify the petition. The petition will be handled by the departmental Petitions, Appeals, and Grievances Committee, which consists of at least three faculty members independent of the cause for the petition. After investigation, the committee will submit a written report to the department chair, describing the circumstances, the decision, and the rationale for the decision. The department chair will convey the final decision to the student.

Petitions regarding academic decisions must be submitted in writing within 15 days from the time that the student knew or should reasonably have known of the decision being petitioned, or within 15 days after an informal effort to resolve the situation has not been successful. Petitions seeking exceptions to academic requirements or regulations should be submitted in writing at least 30 days before the requirement or regulation takes effect. Late petitions may be dismissed, except for unusual situations when a delay is found justifiable by the unit receiving the petition. Petitions will be acknowledged in writing (including emails) immediately upon their receipt.

A student (or other parties affected by the decision) is allowed only one level of appeal from a decision regarding a petition. In general, the appeal process will be resolved at the lowest level possible. An appeal must be submitted within 15 days from receipt of the decision that is being appealed. Late appeals will be dismissed, except for unusual situations when a delay is justified. Appeals will be acknowledged in writing (including emails) immediately upon their receipt.

A petition/appeal should indicate the requirement, regulation, or judgment that is the subject of the petition/appeal, the specific exception requested, and the grounds for the request. An appeal must indicate why the decision involving the earlier petition was incorrectly decided. Grounds for a petition/appeal could be procedural errors by academic or administrative personnel or special circumstances found to be mitigating by the unit receiving the petition/appeal. Disagreement over evaluation of academic quality will not be considered as an appropriate basis for petitions/appeals unless the evaluation is found to be patently unreasonable by the unit receiving the petition/appeal. Petitions involving a violation of University policy or improper conduct by University personnel will be handled as grievances (see Grievances).

Petitions and appeals will usually be resolved within 30 days of their submission. When such resolution cannot be achieved within 30 days, students will be informed of the delay before the 30 days are over. A resolution of the petition or appeal must be achieved within 60 days.

All time frames in this procedure refer to academic calendar days, and exclude mid-term, inter-term and summer recesses. (This exclusion does not apply to a student who is enrolled during the summer.) All petitions and appeals, as well as responses to petitions and appeals, must be in writing. Email communication is considered to be "in writing".

Grievances. A grievance is a complaint regarding inappropriate conduct by other students, faculty members, or staff. Inappropriate conduct encompasses both inappropriate personal conduct, such as sexual harassment, as well as inappropriate official conduct, such as violation of University policies. Specific policies exist to address grievances based on discrimination or sexual harassment and these policies must be followed in situations involving these issues. Grievances against another student may be raised with the assistant dean of student judicial programs and addressed under the Code of Student Conduct. In other cases, a student may present a grievance in writing at the lowest appropriate level, typically the department or school. If a satisfactory resolution is not obtained at that level, the student may appeal the outcome of the grievance by presenting the problem at the next administrative level, such as the school, Office of Graduate and Postdoctoral Studies, Provost, or President. Grievances against non-faculty staff members may also be brought to the Employee Relations Director in Rice's Human Resources office.

The procedures for handling grievances are analogous to those for handling petitions and appeals. Students submitting grievances must so indicate in their submissions.

Problem Resolution. During the course of graduate studies, problems that do not fall under the category of grievances, described above, may arise in the relationship between a graduate student and his/her program or his/her advisor. Students should attempt to resolve such problems by informing the appropriate faculty members and working together to resolve the problem. When attempts to resolve the problem informally are unsuccessful, the following problem-resolution procedure will be used:

- 1. The student will submit the problem in writing to the department chair, who will then attempt to resolve it.
- 2. If the student remains unsatisfied, the problem will be presented to the department Graduate Studies Committee for resolution. Both the student and the program chair will submit a written record of their views to this committee.
- 3. If the student remains unsatisfied, the problem will be referred to a standing subcommittee of the Graduate Council and composed of three faculty members (representing diverse disciplines within the university) and a graduate student, with the Dean of Graduate and Postdoctoral Studies as an ex-officio member. A written report of proceedings at stage 2 will be presented to the Chair of Graduate Council

for forwarding to the subcommittee, along with all other written materials generated during the investigation. The decision of this subcommittee is considered final.

The time frame for handling problem resolution is similar to that for handling petitions, appeals, and grievances.

## Title IX

Rice encourages any student who has experienced an incident of sexual, relationship, or other interpersonal violence, harassment or gender discrimination to seek support. There are many options available both on and off campus for all graduate students, regardless of whether the perpetrator was a fellow student, a staff or faculty member, or someone not affiliated with the university.

Students should be aware when seeking support on campus that most employees are required by Title IX to disclose all incidents of non-consensual interpersonal behaviors to Title IX professionals on campus who can act to support that student and meet their needs. The therapists at the Rice Counseling Center and the doctors at Student Health Services are confidential, meaning that Rice will not be informed about the incident if a student discloses to one of these Rice staff members. Rice prioritizes student privacy and safety, and only shares disclosed information on a need-to-know basis.

If you are in need of assistance or simply would like to talk to someone, please call Rice Wellbeing and Counseling Center, which includes Title IX Support: **3311/(713) 348-3311** 

Policies, including Sexual Misconduct Policy and Student Code of Conduct, and more information regarding Title IX can be found at safe.rice.edu