WISCONSIN
UNIVERSITY OF WISCONSIN-MADISON

Environmental Chemistry & Technology

Graduate Student Handbook

2023-2024

Department of Civil & Environmental Engineering

Reference this handbook to learn about the unique policies, requirements, procedures, resources, and norms for graduate students in the Environmental Chemistry and Technology MS and Ph.D. programs.

Updated: August 2023

Welcome

A Message from Greg Harrington, Department Chair

Welcome to the Environmental Chemistry and Technology (EC&T) Program and the Department of Civil and Environmental Engineering (CEE) at the University of Wisconsin-Madison!

Established in 1870, our department has helped push the field of civil and environmental engineering forward for over 150 years. It's remarkable to think about the extent of our long history, about all the classes taught, concrete canoes raced, transformative research advances made, and talented students who have passed through Engineering Hall. We are excited that you have chosen to pursue your graduate studies with us, and we look forward to working with each and every one of you.

As you embark on this important chapter in your life and career, please know that we are here for you. My door is always open on campus and online, and you will find that the same goes for all our faculty and staff. We are here to answer your questions and help in any way we can.

The Badger Engineering community is like none other. I am confident that you will find the tools and support necessary to succeed beyond your wildest dreams and expectations here at UW-Madison. Work hard, play hard, and have fun along the way.

If you ever need anything, please don't hesitate to contact me. I look forward to seeing what you accomplish and cheering you on every step of the way.

On, Wisconsin!

Greg Harrington, Ph.D.
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Table of Contents

Navigating Policy and Resources at UW-Madison

This handbook is one of many sources to consult as you become familiar with the policies, procedures, requirements, resources, and norms of graduate education at UW-Madison:

Who to Contact

Many of your questions about how to meet expectations and thrive as a graduate student will be answered by the various sources of policies, procedures, requirements, resources, and norms listed above. Several key people in the department and on campus who are ready to answer your questions include:

Stacey Koch, Graduate Student Services Coordinator
sakoch3@wisc.edu (608) 890-2420

Matt Ginder-Vogel, Associate Professor and EC&T Program Chair
mgindervogel@wisc.edu (608) 262-0768

Greg Harrington, CEE Department Chair and Pieper Family Chair for Servant Leadership
gwharrin@wisc.edu (608) 263-7773

Barry Crook, CEE Department Administrator
barry.crook@wisc.edu (608) 262-7812

James Lazarcik, Water Science and Engineering Laboratory (WSEL) Building Manager
lazarcik@wisc.edu (608) 262-2899

Computer Support civilsupport@engr.wisc.edu

Environmental Chemistry and Technology Faculty, 2023-24

Title	First	Last	Dept.	Email
Associate Professor	Karthik	Anantharaman	Bacteriology	karthik@bact.wisc.edu
Professor	Timothy	Bertram	Chemistry	tbertram@chem.wisc.edu
Associate Professor & EC&T Chair	Matthew	Ginder-Vogel	CEE	mgindervogel@wisc.edu
Professor	Gregory	Harrington	CEE	gwharrin@facstaff.wisc.edu
Professor	James	Hurley	CEE	jphurley@wisc.edu
Professor	K.G.	Karthikeyan	Biological Syst. Engineering	kkarthikeyan@facstaff.wisc.edu
Assistant Professor	Erica	L-W Majumder	Bacteriology	emajumder@wisc.edu
Professor	Katherine	McMahon	CEE/Bacteriology	tmcmahon@engr.wisc.edu
Assistant Professor	Inna	Popova	Soil Science	ipopova@wisc.edu
Assistant Professor	Mohan	Qin	CEE	mohan.qin@wisc.edu
Professor	Christina	Remucal	CEE	remucal@wisc.edu
Professor	Eric	Roden	Geoscience	eroden@geology.wisc.edu
Professor	Thatcher	Root	Chem. & Biological Engineering	twroot@wisc.edu
Professor	James	Schauer	CEE	jjschauer@wisc.edu
Professor	Anita	Thompson	Biological Syst. Engineering	amthompson2@wisc.edu
Assistant Professor	Hoaran	Wei	CEE	haoran.wei3@wisc.edu
Associate Professor	Thea	Whitman	Soil Science	twhitman@wisc.edu
Assistant Professor	Xia	Zhu-Barker	Soil Science	zhubarker@wisc.edu

All other Program and Department faculty and staff are in the College of Engineering Directory.

Graduate Student Services Coordinator – Stacey Koch
Each graduate program will have at least one department staff person typically called a Graduate Student Services Coordinator who serves as a point person for program policy and procedures. Graduate Coordinators are well versed in most elements of graduate education that extend beyond academic instruction in your program and will likely be your first stop for questions related to anything in this handbook.

Program Chair – Matthew Ginder-Vogel
Each graduate program has one faculty member designated to direct its educational vision and structure.

Names and contact information of your Graduate Coordinator and Director of Graduate Studies can be found on your program's page in the *Graduate Guide*. Simply navigate to the "Major/Degree" tab, click on your program's name, and look for the contact information box on the righthand side.

Faculty Advisor
Each student will be assigned a faculty advisor in each graduate program in which they are enrolled. Your faculty advisor(s) will be a key source of guidance for your academic development. Further definition can be found in the UW Policy Library. Guidelines for finding, changing, and working with your advisor can be found in the Advising & Mentoring section of this handbook.

The name and contact information of your faculty advisor can be found in your Student Center on MyUW under "Academic Progress" and then "Advisors."

Graduate School Services
For general inquiries and graduate student services from the Graduate School, see the operations and front desk contact information on the Graduate School website.

Office of the Registrar
The Office of the Registrar is the contact for student records, fines and holds, FERPA, and more.

Office of Student Financial Aid
The campus clearinghouse for all student financial matters at UW-Madison including eligibility details and how to apply for financial aid. To learn more, visit the OSFA website.

Department & Program Overview

The UW-Madison Department of Civil and Environmental Engineering (CEE) has served as home to a community of researchers and students for over 150 years. Founded in 1870, a small team of researchers and just five students formed the Department at the time it was established. Early curriculum explored the study of railway, topographic, highway, bridge, hydraulic, and sanitary engineering, as well as land survey and city planning.

Since then, CEE has grown and evolved to include eight cross-disciplinary research areas with over 30 full-time faculty members, 550 undergraduate students, and 170 graduate students. As one of the top-ranked programs of our kind nationally and internationally, we are proud to push research and education forward in civil engineering, environmental engineering, geological engineering, and environmental chemistry and technology. From autonomous vehicles to stormwater management, PFAS, natural disasters, and next generation building materials, Badger Engineers are continuously impacting the world around us in positive ways.

We are passionate about engineering and the opportunities it provides to transform society and how we interact with the natural world. The grand challenges we face locally, nationally, and beyond call for innovative and sustainable solutions. With an eye on the future, we continuously strive to build a supportive environment with access to opportunities and experiences that educate, prepare, and inspire the next generation of Badger Engineers.

The EC&T Program offers advanced instruction and research training in environmental chemistry and environmental technology leading to a Master of Science (MS) or Doctor of Philosophy (Ph.D.). A doctoral minor in environmental chemistry and technology is also offered. The program trains candidates for careers in teaching, research, resource management, environmental consulting, and private sector/industrial positions. Areas of work include the development of advanced technologies and materials for air and water purification and for the saving and storage of energies, alternative energy technologies, water and air pollution control, soil and sediment remediation, environmental technology, chemical limnology, and groundwater chemistry.

To learn more about the EC&T Program and CEE Department, visit us online at the Civil and Environmental Engineering website and connect with us on Instagram, LinkedIn, or Twitter.

EC&T Program Mission

Environmental Chemistry & Technology (EC&T) is an interdisciplinary program offering both Master of Science (MS) and Ph.D. degrees. The strength of the program lies in its interdisciplinary approach bringing state-of-the-art scientific and engineering principles to the field of Environmental Chemistry and Technology. This enables EC&T to educate and train graduate students for varied careers as well as to advance knowledge and techniques for both scientific research and applied problem solving.

Learning Outcomes

Every graduate program at UW-Madison has expectations for what students will learn in the program and a curriculum to support the development of the students from admission to graduation. These expectations, more formally defined as learning outcomes, specify what students will know, or be able to do, as a result of completing the program. Connecting program requirements to the learning outcomes results in a program that helps students see requirements as the scaffolding for their development as scholars and professionals rather than simply milestones to be met.

EC&T MS learning outcomes are located in the Environmental Chemistry and Technology M.S. Guide.

EC&T Ph.D. learning outcomes are located in the Environmental Chemistry and Technology PH.D. Guide.

Diversity, Equity, and Inclusion

Introduction

The EC&T Program is committed to creating a safe, welcoming environment for all identities. We specifically acknowledge that racial and ethnic diversity in environmental science and engineering disciplines has historically been low, despite the fact that Black, Indigenous, and people of color (BIPOC) and Latinx communities are disproportionately affected by environmental problems (e.g., industrial pollution, water quality issues).

Awareness of Student Support Networks

EC&T students should educate themselves about measures of support at UW-Madison available to international students and students of historically underrepresented groups in STEM fields. PIs and non-BIPOC students with limited knowledge of such programs promote the “diversity tax” by putting consultations about them on the shoulders of current international students and students belonging to underrepresented groups. Hence, all EC&T students are expected to know the basic options for such student support at UW-Madison; faculty are encouraged to educate themselves as well.

For example, since the Graduate Engineering Research Scholars (GERS) is credited as the strongest UW-Madison program to recruit and retain BIPOC and Latinx students in engineering, EC&T students should educate themselves about how GERS works to provide historically underrepresented students with assistance and support throughout graduate school. For example, EC&T students should have knowledge of the GERS function that the faculty must nominate qualifying students to receive advanced opportunity fellowship (AOF) through an application process. While we encourage EC&T faculty to educate themselves as well, EC&T students should be able to share this type of information with faculty and potential students.

UW-Madison Diversity Statement
"Diversity is a source of strength, creativity, and innovation for UW–Madison. We value the contributions of each person and respect the profound ways their identity, culture, background, experience, status, abilities, and opinion enrich the university community. We commit ourselves to the pursuit of excellence in teaching, research, outreach, and diversity as inextricably linked goals. The University of Wisconsin–Madison fulfills its public mission by creating a welcoming and inclusive community for people from every background — people who as students, faculty, and staff serve Wisconsin and the world."

UW-Madison Graduate School Diversity Statement
"Community—one that is strong, supportive and diverse—is at the center of a sound graduate education. The Graduate School at the University of Wisconsin–Madison is committed not only to providing a robust education in a world-class research enterprise, but also to building a diverse community of scholars. We are working to help departments and programs across the university recruit and reward talented and diverse faculty, students and staff to demonstrate our ongoing commitment to these values."

Intersectionality Statement - *adapted from Ginder-Vogel lab diversity statement*
"We recognize that an intersectional framework is critical to addressing the crossroads of marginalized identities and their complexity in STEM workplaces. People that hold several marginalized identities often experience multiplied prejudice and discrimination. This is applicable to many identities and characteristics including race, ethnicity, gender, LGBTQI+, income-level, colorism, and education level. Our program is committed to applying an intersectional framework to all the justice, equity, diversity, and inclusion (JEDI) work we do."

Justice, Equity, Diversity, and Inclusion (JEDI) Information

Within the CEE program, we recognize that all people inherently deserve safe, inclusive work environments. Hence, this section is intended to serve as a living record of:

1. the current state of the CEE Department's progress in diversity, equity, and inclusivity
2. the program's involvement in the CEE Justice, Equity, Diversity, and Inclusion (JEDI) Committee

This section outlines various resources pertinent to CEE students seeking support and/or information about JEDI initiatives, either on-campus at UW-Madison, across the country, or internationally. The following is by no means a complete compilation of resources but highlights those that current and previous Department students have found helpful. Students are encouraged to look at these resources and find the ones that are best suited for them.

Office of Inclusion, Equity, and Diversity in Engineering (IEDE)
The Diversity Affairs Office provides guidance and support to underrepresented students and women in the College of Engineering. The department offers a variety of programs and services that are designed to enhance the cultural, educational, and personal development of all students within the college. To learn more, visit the IEDE website.

Student Affairs
Student Affairs is 500+ people across 16 campus departments dedicated to helping UW–Madison students succeed in and out of the classroom. We celebrate diversity and creating a welcoming and safe community where all students can grow. Our programs and services cover areas including health and well-being, identity and inclusion, leadership and engagement, and student advocacy. To learn more, visit the Student Affairs website.

Office of Diversity, Inclusion, and Funding
Housed within the Graduate School, the Office of Diversity, Inclusion, and Funding provides resources for social networking, learning, and professional development with a focus on underserved graduate student populations. Visit the Graduate School website to learn more and subscribe to their newsletter.

CEE JEDI Committee
The CEE Department's JEDI committee was formed to create a safer and more welcoming environment to members of the Black, Indigenous, and people of color (BIPOC) community on the departmental level. The members of the CEE JEDI

committee are UW-Madison faculty, staff, and graduate student representatives. The members of this committee aim to create a more inclusive environment by providing opportunities for scholarships and creating a community where BIPOC feel welcomed and valued.
The CEE JEDI Committee aims to facilitate a more just, equitable, diverse, and inclusive community and working environments for all students, faculty, and staff through:

- **Environmental Justice Education** - Faculty are encouraged to include environmental justice issues in core curriculum and degree progress and students are encouraged to pursue education on environmental justice topics. For example, CEE students can take courses related to environmental justice, and/or participate in the LiteRACEy Discussion Group to learn more about systemic racism in the environmental field. To facilitate student education on environmental justice, we students have and will continue to encourage faculty members to incorporate aspects of environmental justice into program courses.

- **Recruitment and Retainment** - The CEE program aims to address discrepancies between statements of diversity and inclusion and take actions to actively recruit and retain students of diverse backgrounds. To address this, the JEDI Committee encourages faculty to advertise open positions in research groups (e.g., via personal websites, the UW website, or ResearchGate). Additionally, to better inform future recruitment efforts, current CEE students will solicit feedback from participants in recruiting visits.

- **Collaboration and Networking** - Inviting a range of seminar speakers further promotes and acknowledges the variety of intellectual and personal identities present in our field, while also providing students with the opportunity to build diverse scientific networks. As such, the JEDI committee encourages CEE faculty to solicit student input on seminar speakers through a call for speaker requests during the planning phase for the fall seminar (CEE 909). For consideration of the next iteration of speakers, faculty are encouraged to request student feedback following the presentations. Additionally, CEE students should also seek out a diverse range of collaborations and networking opportunities to ensure that the CEE program reflects many perspectives and opportunities. We encourage CEE faculty to aid students in developing these diverse networks by developing new collaborations and networks reflective of a diverse and inclusive STEM field themselves. Further, students are encouraged to consider a diversity of perspectives when selecting faculty to serve on their thesis committees.

- **Lab Diversity Statements** - The JEDI committee encourages research advisors to publish a statement of commitment to diversity on their research group web pages. It is suggested that each research advisor work with their current lab members to develop and/or revise the specific ways in which their research group is working towards building a more diverse, inclusive, and equitable lab environment.

EC&T JEDI Committee

The EC&T JEDI Committee is a group of graduate students within the program that aims to cultivate a more inclusive, equitable, and diverse work environment. Additionally, the committee facilitates education and discussion among students and affiliated faculty/staff in order to encourage understanding of environmental justice and systemic racism, particularly as it presents itself in academic settings.

JEDI Resources

This section outlines various resources pertinent to CEE students seeking support and/or information about JEDI initiatives, both on-campus at UW-Madison and across the country. It is by no means a complete compilation of resources, but it does highlight resources that current and previous CEE students have found helpful.

The resources are organized in four categories: Research, Teaching, Professional Societies, and Diverse UW-Madison Student Organizations.

- **Research -** Graduate Assistants' Equity Workshops (GAEWs) provide information and resources related to diversity, discrimination, and harassment, and are offered multiple times every academic year. Several workshops are available that address implicit and unintentional bias and discrimination. Two examples include the 'Breaking the Bias Habit' workshop and 'The Prejudice Habit Breaking Intervention'. For a complete list of options visit the GAEWs website.

  The UW-Madison Division of Continuing Studies also offers a number of courses and workshops focused on diversity and inclusion, but these do have associated fees.

  The University of Wisconsin's Professional Development offers several professional development programs, courses, and seminars on diversity and inclusion. Some relevant programs are Inclusion@UW and Thrive@UW.

  The UW-Madison Diversity Forum is a conference held every Fall that promotes

the exploration and discussion of diversity and inclusion issues.

- **Teaching and Mentoring** - The UW-Madison Delta Program helps future faculty in STEM fields develop skills to improve higher education instructional practices, through the implementation of Teaching-as-Research, Learning Communities, and Learning-through-Diversity. This includes a variety of Delta Program courses and Delta Program workshops that support inclusive and diverse teaching practices.

  Center for the Improvement of Mentored Experiences in Research (CIMER) also offers workshops and training for graduate students, post-docs, and professors to improve their mentoring skills for students of underrepresented racial, ethnic, and socioeconomic groups. CIMER includes the Culturally Aware Mentoring (CAM) program.

  UW-Madison is a partner in the Center for the Integration of Research, Teaching, and Learning (CIRTL), which works to better STEM undergraduate education by developing future faculty educated in evidence-based teaching practices for a diverse audience.

  UW-Madison Learning Communities for Institutional Change and Excellence (LCICE) facilitates dialogue around building inclusive and supportive employment and educational environments.

  The Center for Teaching, Learning, and Mentoring provides professional development opportunities and more.

  The UW-Madison Division of Diversity, Equity & Education Achievement (DDEEA) compiled a list of campus faculty and staff diversity and inclusion resources that assist in supporting the campus community.

  Women in Science & Engineering Leadership Institute (WISELI) hosts a workshop where participants discover and address their own implicit biases and assumptions about groups based on race, ethnicity, and gender.

  UW-Madison Teaching Academy hosts retreats on inclusive teaching practices that can be incorporated into current teaching practices.

  - **Professional Societies**
    - American Chemical Society – One of the World's oldest scientific orgs:
      - Chemists with Disabilities.

        - Committee on Minority Affairs
    - American Geophysical Union (AGU) – pioneers of new approaches to grow the exchange of scientific knowledge: https://www.agu.org/Learn-About-AGU/About-AGU
        - Diversity and Inclusion at AGU
        - Opportunities for underrepresented students:
            - Lloyd V. Berkner Travel Fellowship for citizens of economically disadvantaged countries
            - Mentoring programs for students and early career scientists from diverse backgrounds.
    - Gordon Research Conferences (GRC) - dedicated to building communities that advance the frontiers of science
        - GRC Diversity
        - Carl Storm Underrepresented Minority Fellowship
        -

Diverse Student Organizations

This subsection lists various graduate student organizations, clubs, and initiatives that support underrepresented students in STEM at UW-Madison through local, regional, and national chapters. For further information, visit the UW Wisconsin Engineering Student Council website.

- American Indian Science and Engineering Society (AISES)
    - UW Chapter
    - National Chapter
- Association for Women in Science (AWIS)
- Graduate Engineering Research Scholars (GERS)
- Graduate Women in Science
- Mexican American Engineers and Scientists (Latinos in Science and Engineering; (MAES)
- National Action Council for Minorities in Engineering (NACME)
- National Organization of Gay and Lesbian Scientists and Technical Professionals (NOGLSTP)
- National Society of Black Engineers (NSBE)
    - Wisconsin Black Engineering Student Society (WBESS)
    - National Chapter
- Out in Science, Technology, Engineering, and Mathematics (oSTEM)
- Queer and Trans Engineers (QTEs) UW Chapter

- Society for Advancement of Chicanos and Native Americans in Science (SACNAS)
    - UW Chapter
    - National Chapter
- Society of Asian Scientists and Engineers (SASE)
- Society of Hispanic Professional Engineers (SHPE)
    - UW Chapter
    - National Chapter
- Society of Women Engineers (SWE)
    - UW Chapter
    - National Chapter
- UW-Madison QGrads https://www.facebook.com/groups/85996105236
- UW-Madison International Graduate Students https://grad.wisc.edu/international-students/
- UW-Madison International Student Services https://iss.wisc.edu/
- Wunk Sheek https://win.wisc.edu/organization/wunksheek/

Getting Started as a Graduate Student

This section guides provides helpful information for beginning your journey as a graduate student at UW-Madison.

New Graduate Student Checklist

Be sure to review all steps listed on the Graduate School's New Student webpage for new graduate students.

In addition to a checklist for all new graduate students, that webpage includes sections with additional steps to take if you are a new international student, student with a disability, student veteran, student with children, or student with funding.

How to Get Involved

As a graduate student at UW-Madison, you have a multitude of opportunities to become involved on campus and in your academic discipline with over 750 registered student organizations at the UW-Madison. Over 50 of those organizations are recognized as official student organizations within the College of Engineering. Getting involved with a student organization often enhances your academic, professional, and personal growth by developing advanced leadership, communication, and collaboration skills. It also provides opportunity for professional networking.

Many organizations that CEE students are involved with can be found under the previous section of this handbook under the heading Diverse Student Organizations. Other organizations specific to CEE and engineering students include:

- American Society of Civil Engineers
- Engineers Without Borders (EWB)
- Environmental Engineering Club (EEC)
- Tau Beta Pi
- Women in Science and Engineering (WISE)

Recent EC&T Student Engagement

- Rock River Coalition – A stream monitoring organization for the Rock River watershed. In teams of two or three, volunteers are assigned a site in the watershed where they conduct a monthly stream health assessment (DO,

temperature, inverts, etc.) and collect samples for nutrient monitoring. It is a great way to get involved with a multi-generational community organization using the skills that most students already have as a part of this program.
- Saturday Science – Monthly opportunities for the public to participate in fun science activities at UW-Madison. EC&T student volunteers engage kids and families in the activities, while teaching them about the science behind the fun. Learn more on the WARF website.

For a complete list of student organizations registered at the UW-Madison, visit UW-Madison's Center for Leadership & Involvement website. For a complete list of the organizations recognized by the College of Engineering, visit the College of Engineering Student Organizations webpage.

On Campus & In the Community

The Wisconsin Idea is the principle that education should influence and improve people's lives beyond the university classroom. For more than 100 years, this idea has guided the university's work. Information on how to engage in campus and local community life can be found through the Graduate School's current student page.

If you are a student actively involved in leadership and service activities, consider nominating yourself for membership in the Edward Alexander Bouchet Graduate Honor Society.

Students should also consider becoming involved with and/or knowledgeable of Associated Students of Madison (ASM), the official student governance body of UW-Madison. ASM is composed of roughly 50 elected or appointed students, 50 student employees, 12 professional staff members, and 200 student appointees on committees that hold legal rights to recommend university policies, budgets, and candidates for UW employment. ASM allocates approximately $50 million in segregated university fees each year and is responsible for management of the Student Activity Center and distribution of the student bus pass.

International Student services (ISS) provides holistic support for students on F & J visas by providing holistic support through advising on immigration, personal, and cultural matters, and by organizing events and activities to support students' engagement and development within the campus community.

Office/Building/Supplies Information

Building Hours
Engineering Hall is open from 7:00 a.m. to 7:00 p.m., Monday through Friday and 7:00 a.m. to Noon on Saturday. The Water Science and Engineering Laboratory is open Monday through Friday 7:30 a.m. to 4:30 p.m. Both buildings are closed on Sundays and football Saturdays. To access Engineering Hall after-hours, hold your Wiscard by the keypad outside the door. After-hours access to WSEL requires a building key.

Keys
Water Science and Engineering Laboratory keys can only be obtained after completing safety training for the building. Contact the WSEL building manager to arrange safety training and receive your keys.
In Engineering Hall, keys are required for access to any assigned office desk space and laboratory rooms. To obtain Engineering Hall room key(s):

1. Request your key(s) through the Keylime Database
2. Retrieve your key(s) from the front office (2205 Engineering Hall) once you have received a confirmation email
3. After-hours access to the building is automatically added to all Engineering student's Wiscard. If you have trouble with after-hours access, contact the UW Police Department at (608) 264-2677.
4. When you leave the university, return your keys to the front office. There is a $75 fine for lost or unreturned keys.

To access the building after-hours, hold your Wiscard by keypad outside the door.

Rules for Keys

1. Do not share your office, laboratory, building keys or WIscard with others.
2. Do not duplicate your office, laboratory, or building keys.
3. Please return keys "in person" (i.e., do not pass them on to others).

Desk Assignment
Desk assignments are coordinated by the WSEL Building Manager. Please contact the building manager for assignment details and any related questions.

Office Etiquette
Please be mindful of your office mates and keep your office area clean and professional (do not bring in beds, pets, etc.). Tours also take place throughout the semester, so a clean and professional office is appreciated.

If you are a teaching assistant and share an office with other graduate students, let them know your office hours. Some TAs have found it helpful to leave a destination indicator at their desk, so if someone is looking for them, they can find them. When you graduate, or no longer use your desk area, please thoroughly clean your desk.

Recycling
Recycling is mandatory in the city of Madison. Recyclable containers (aluminum cans, tin/steel, glass, and high-density plastic bottles) should go in the blue receptacles located in the hallways of Engineering Hall. Newspapers should be put in the blue waste cans labeled "Mixed Paper." Office trash cans are typically emptied once a week. At other times, full containers may be left in the hallway for emptying. For more information, see the UW-Madison Recycling Guide.

SWAP (Surplus with a Purpose)
SWAP collects, processes, and redistributes surplus property (such as computer equipment, office furniture, lab supplies, etc.) from UW-Madison and other state agencies. *If you see furniture, computers, etc. in campus hallways, it is there for SWAP, it is not to be taken at will*. If you have equipment/supplies you no longer need, please contact your advisor and CEE's Department Administrator to arrange for SWAP pick up. DO NOT leave unwanted items in the hallway without contacting the Department.

Supplies
If you have access to funding through a research and/or teaching assistantship, you may be able to order certain UW-Madison related supplies. See the staff in the CEE Department office (2205 Engineering Hall) to discuss your supply purchasing options. In general, graduate students are responsible for obtaining their own office supplies.

College of Engineering (COE) Student Shop (TEAM Lab)
The College of Engineering Student Shop is accessible to all students in the College of Engineering. A web-based reservation system is available for reserving high use machines. The shop provides hands-on instruction and consultation to students who wish to design and/or construct physical components or systems. Design courses offered by several engineering departments utilize the student shop as a resource. Feel free to check out the College of Engineering Student Shop for course projects online. The Makerspace is another construction hub that includes 25,000 square feet of shop and flex space with a broad range of prototyping equipment donated by the Grainger Foundation.

Conference Rooms
The Water Science and Engineering Laboratory has one conference room. To reserve the WSEL conference room, contact the general WSEL service email at wse@engr.wisc.edu

Engineering Hall has multiple conference rooms for official UW business use. Official use consists of lab/group research meetings, preliminary exams, thesis and defense presentations, etc. Conference rooms are not to be used for TA office hours, study groups, personal meetings, etc. Review the College of Engineering's Space Use Policy for more information.

Conference rooms in Engineering Hall are reserved through the EMS system. Guidance on how to reserve a conference room is available at the CAE KnowledgeBase website.

Telephones
Student access to university telephone services is limited to internal university and local calls. University-related (research, teaching, extension) long distance calls may be made on the telephone of your major professor with their permission. Guidance on how to dial out based on call type is provided below.

- Internal university call: just dial the seven-digit phone number
- Local calls: dial 1 + the phone number
- Toll-free calls: 1 + 1 + 800 (866, 877, or 888) + 7-digit number
- Calling card calls: dial 1 and follow instructions on the back of the card
- Collect or billing to a third number calls: 1 + 0 + area code + number
- International calls: 1 + 011 + country code + city code + number
- All other long-distance calls: 1 + 1 + area code (if outside 608 area) + number

Mail
Personal mail should be sent to your home address. Mail received for students who do not have a mailbox will be sent an email to let them know they have mail in the front office. The mail will be stored at the front desk and kept for three weeks. If the student has not picked up their mail in three weeks, it will be thrown away.

Outgoing Mail
Campus mail can be taken to 115 Water Sciences or 1342 Engineering Hall (the SW corner of Engineering Hall), where there are campus mail bins. You can also drop off stamped personal U.S. mail in the U.S. mail bins at these locations. There are also UPS drop boxes at these locations for outgoing and prepaid UPS packages. If you are doing a UW-Madison business-related mailing, please see the staff in 150 WSEL or 2205 Engineering Hall for assistance.

Faxes
The CloudFax service facilitates the university's transition from analog fax lines and machines to a system that leverages Microsoft 365 email to send and receive faxes electronically. The requirement to use CloudFax includes being either a UW-Madison faculty, staff, or student employee. For more information and resources, visit the UW Information Technology CloudFax webpage.

University Vehicles

Driver Authorization
You must be an authorized driver to use a UW fleet vehicle for business purposes. The authorization form and additional details can be found on the UW Division of Business Services website.

Please allow up to 10 days for the processing of your authorization. To complete the authorization form, you will need the following:

- UW NetID and password
- Driver's license number
    - If using an out-of-state license, a driving abstract or motor vehicle record must be uploaded, along with a legible copy of the license (front only) via the portal. Students with foreign licenses cannot be authorized.
- Supervisor's (or other local authority) name and email address. Please note that the supervisor listed will be notified about your authorization.
- The CEE Department's UDDS code, which is 191500

Fleet Vehicles
Use the Wisconsin Fleet management System website to make, view or cancel a Fleet Vehicle reservation. Select "UW" in the drop-down menu, choose your home institution, and then log in with your NetID (or other institution log-in information).
To use a fleet vehicle, you must first become an authorized driver (which has up to a 10-day waiting period). See above for details on how to become authorized.

Your driver's license number and a funding code will be needed for the online registration process. Other info needed for a fleet vehicle request includes:

- Preferred type of vehicle
- Departure date and time
- Destination
- Estimated mileage
- Number of vehicle occupants

If a UW-Madison fleet vehicle is not available, you may choose to be put on a waiting list. You may also obtain a certificate of unavailability to ensure reimbursement for using a personal vehicle. You also have the option of reserving a fleet vehicle from the Wisconsin Department of Administration (DOA). DOA fleet vehicles are acquired in the same manner as UW-Madison fleet vehicles, but the DOA fleet is located at 201 South Dickinson Street (on the eastside of Madison). The DOA has different rules and policies than UW-Madison.

The UW-Madison Fleet office (27 N. Charter Street) is open from 6 a.m. to 3:30 p.m. To pick up a fleet vehicle, you must have your Wiscard and valid driver's license with you. UW-Madison Fleet personnel will make sure you are an authorized driver by checking the Fleet Portal Database. You will be issued a credit card for gasoline, which should cover most of the US. Charges made on these cards are billed to UW-Madison Fleet, so they are not personally reimbursable.

To pick up a fleet vehicle after hours, you must make prior arrangements with the UW-Madison Fleet office. Fleet vehicles may be returned after hours using the key drop box outside the UW-Madison Fleet office.

Reimbursement of Personal Funds for University Business
To be reimbursed for a trip involving UW business/research, you must submit a request online. Information on what you will need, important deadlines, and a link to submit a reimbursement request is located on the Division of Business Services website.

It's recommended that you discuss any purchases with a CEE Department Financial Specialist before making them to ensure full reimbursement. Consult with your faculty advisor on which specialist you should talk to for support. You may also be reimbursed for any UW-related supplies purchased with personal funds using this same online system. A fund account number and the original receipts are required to complete the reimbursement request, so have these on-hand. If you are unsure about this, please consult your faculty advisor.

IMPORTANT: You must submit all travel receipts, even if paid directly by the UW in advance. Provide justification/explanation of all travel performed while conducting your research, as well as any supplies purchased. If you are attending a meeting or conference, please provide any correspondence, flyer, and/or electronic announcement of the meeting. Complete flight itineraries are also required. Please see the Financial Specialist in 2205 Engineering Hall for assistance with the E-Reimbursement online system.

Student Life Resources

Bus Pass - A perk of being a student at the UW-Madison is an Associated Students of Madison (ASM) Bus Pass, which is good for unlimited rides on Metro, Madison's bus and paratransit system. For information on when and how to get a bus pass, visit the Associated Students of Madison website.

Campus and Visitor Information
The gateway to campus and visitor information and guidance for navigating the community. Learn more at the UW Campus and Visitor Relations website.

Housing
There are many different housing options in Madison. The key to finding a good fit is to start early. Keep in mind that almost all off-campus housing leases are 12 months long and start in August. Helpful resources in your search include:

- University Student and Faculty Apartments
- Campus Area Housing Listing Service

Libraries
A variety of campus resources including databases, study rooms, equipment and more can be accessed through the UW-Madison campus library system. The closest library to Engineering Hall is the Steenbock Library on Babcock Drive. For information on the Steenbock Library, visit the Steenbock Library webpage. For all other library-related information, visit the UW Libraries website.

McBurney Disability Resource Center
The McBurney Disability Resource Center is an office located within the Division of Student Affairs that is committed to creating an accessible and inclusive educational experience for students. Learn how to become a McBurney client, review prospective student information, services offered, scholarships, and more via the hyperlink above.

Recreational Sports and Facilities – UW-Madison students, faculty, and staff have access to a variety of recreational, fitness, and athletic offerings through campus with a valid Wiscard, free of charge. A minimal Recreational Membership Fee is required to reserve court and ice times and to participate in group fitness classes. For locations and more, visit the UW Recreation & Wellbeing website.

University Health Services (UHS)
University Health Services UHS is the health clinic on campus, open to any current UW-Madison student. The team of experienced professionals combine routine health care

(and you can choose to see the same general-medicine clinician throughout your UW years) with specialty clinics that focus on key health concerns. As experts in college health, they provide services such as: (a) medical treatment of injuries and illnesses, flu and allergy shots, and travel check-ups; (b) counseling for stress reduction, smoking cessation, nutrition, mental health crises, and more; (c) specialized care in our Dermatology, Sports Medicine, and Women's Clinics; and (d) the Blue Bus Clinic for confidential testing and treatment of STDs.

Wiscard - Your official UW-Madison ID card, which gives you access to libraries, recreational facilities, and other campus services. Wiscard is also scanned to gain building entry during off hours and may be used as a campus debit card – accepted at over 45 locations. Your first Wiscard is issued at no cost and is valid throughout your entire academic and/or employment career at the UW-Madison. Lost cards can be replaced for a $25 fee. The Wiscard office is located in room 149 of Union South. For complete details, visit the UW Wiscard website.

Wisconsin Union – This is the social, cultural, and recreational center of campus. Comprised of two buildings: the Memorial Union on the shore of Lake Mendota, and Union South across from Engineering Hall. The Union is a daily gathering place for students, faculty, staff, community members, and visitors. Both establishments also offer events, programs, and performances through the Wisconsin Union Theater, non-credit Mini Courses, and Hoofers outdoor recreation programs. Countless lectures, films, and musical acts can be seen at either location annually. For more information, visit The Union website.

Computing

Research Computer

Your faculty research advisor may provide you with a research computer at your office desk. These computers vary widely in age, speed, and overall condition. If you need a more powerful computer or software beyond Microsoft Office and internet access, you may want to consider other options:

- Discuss getting more powerful equipment with your advisor and consult with Civil IT on purchasing.
- Use a CAE lab computer - CAE maintains several computer labs on the Engineering campus. All College of Engineering software is available through the CAE labs and certain applications are available for installation on your personal computer. To learn more, visit UW's Computer-Aided Engineering website.

- Bring your own laptop – this gives you the most freedom to configure it the way you like. The tradeoff: if the laptop is out of warranty, you'll have to pay to have it repaired. We recommend making sure your laptop is well-equipped for engineering applications by reviewing the specifications listed in the CAE KnowledgeBase.
- Borrow a laptop - DoIT offers cost-free loaner equipment to students on a weekly or semester basis via the Computer Lending Program.

Backing up your Data

Keeping your data safe from loss and easily accessible is an important aspect of your studies. Laptops get lost or stolen and drives fail. There are several ways to make sure that your work is backed up via the CAE website.

- CAE student resources
- In addition, CAE offers College of Engineering undergraduates 25GB of filespace that is automatically tied to the CAE lab computers as well as XenApp (see below for more information on XenApp). **Known as the I:\ drive, this is where you must store your thesis and research documents.** Failure to back up documents can result in the loss of research to which you will be accountable for. To learn more about your CAE filespace, visit the CAE KnowledgeBase Index webpage.
- UW-Madison provides free online file storage and collaboration service using Box cloud file storage. Box provides you with a place to store and access files that are needed for active collaboration and integrated within process workflows. All new individual Box accounts and project directories are provisioned with a 50GB storage quota.

What happens to files stored with CAE when you leave or graduate?

CAE closes the accounts of graduating and non-continuing students **2 weeks** into the fall and spring semesters. Access to FTP to retrieve your files is retained for another 4 weeks until the inactive account, including all files, are deleted. You are responsible for backing up your data before you leave. This is particularly important if you must leave and haven't yet completed your thesis as you may lose the thesis document and supporting materials. For more information, visit the CAE KnowledgeBase website.

Guidelines for working with a UW-Madison owned computer – Please DO NOT customize a UW-Madison owned computer by doing any of the following:

- Reformatting the hard drive and reloading the operating system
- Opening the case and adding, removing, or changing anything
- Changing the antivirus or antispyware software

- Removing Microsoft Office
- Removing Novell Netware
- Changing the security settings in any way, including but not limited to turning off the firewall, punching holes in the firewall, and sharing out the hard drive
- Changing/adding/deleting/upgrading computer accounts
- Changing the language settings to a language other than English
- Spraying compressed air at the computer's fan while the computer is running

If you substantially modify the computer from the original setup by reloading or changing the operating system, Civil IT reserves the right to drop support for the computer entirely. The student will either have to call the DoIT Help Desk or take the computer to DoIT Computer Repair.

Appropriate use Guidelines - all UW-owned computers
Certain restrictions exist for using UW-owned computers. Some activities are not proper in a CAE lab because they tie up resources for other purposes. The following table details which activities are for UW-owned computers:

Activity	CAE Lab Computer	UW Office Computer	UW Research Lab Computer
Email - school, work related	OK	OK	OK
Email – personal	Limited	OK	OK
Homework	OK	OK	OK
Surfing the Internet	Limited	Limited	Limited
Playing computer games	NO	Limited	Limited
Commercial or political activities	NO	NO	NO
Civil engineering research	OK	OK	OK
Watching pornography*	NO	NO	NO
Downloading or sharing illegal music or videos*	NO	NO	NO
Creating a webserver or ftp server	NO	NO	NO
Modifying operating system or antivirus software	NO	NO	NO

***** These activities will result in revocation of network privileges could result in civil or criminal prosecution.

Network Access
The College of Engineering has both wired and wireless networks. Wireless access requires being a registered UW student, faculty, staff member; wired access requires being a CoE student. Talk with Civil IT about getting your personal computer connected to the campus network.

Antivirus Requirements and Software Access

Before a computer can be connected to CAE's network, it must have the latest antivirus updates and operating system patches. If you have a university owned computer, internet access and the updates will be done for you before you receive your computer. If you have a personally owned computer, it is your responsibility to do this from another location before coming to connect your computer to the network. Students and faculty can download antivirus software using their NetID from DoIT on UW's Security webpage.

Computer Accounts

The Civil Engineering Department has two types of computer accounts: CAE and UW Campus – DoIT, which will have different usernames and passwords.

Account Type	Uses	How to Activate
DoIT	• WiscMail, campus' email system • WisCal, a web-based calendar program • MyWebspace, 1 gigabyte of file server space you can access from anywhere to store files, publish web pages, and share files • MyUW, a web portal for easy access to campus resources, including campus libraries and payroll statements • Engineering's wireless network	Before you can activate your DoIT account, you must get your Wiscard, which gets you added to a campus database. Once you have your Wiscard, complete the NetID Account Activation form
CAE	• CAE computer labs, including printers, plotters, software packages and scanners • Networked file storage of 2 gigabytes, backed up nightly • Personal webpage space	Once you have your NetID, complete the process outlined on Activating Your CAE Account

Four Ways to Keep our Network Safe

- Log off your computer before leaving your office
- Lock your office when you leave. Secure laptops with a cable or lock them in a desk or cabinet.
- NEVER share your password or post it where others can read it (including email)
- NEVER share your computer's hard drive or turn off your computer's firewall. Our network is only as strong as the weakest link. Millions of dollars of research

are at stake and universities are natural targets for hackers. Hackers attack our campus network regularly.

If you violate the rules, CAE will:

- Remove your network connection
- Notify your research adviser
- Notify the department chair
- Possibly suspend your CAE account

For more information on acceptable use, please visit the following websites:

- CAE computer use guidelines
- DoIT Information Technology Policies

Email

As a CoE graduate student, you receive two email accounts, a WiscMail and a CAE. It is an individual preference as to which email you use, but we do recommend that you forward one email address to the other to ensure you receive important emails from both.

Printing through CAE

Grad students can print to CAE printers located in CAE computer labs from the labs or their office. To learn more about printing through CAE, visit the CAE KnowledgeBase webpage. If you choose to print from your office, you'll need to install and configure Web Print/Mobility Print software.

Printing to Printers in CEE Graduate Student Offices

Some grad student offices have printers. Printer age, speed, and capability vary along with policies on how the printers can be used. Check with your research adviser before printing to an office printer. Please do not disassemble a CEE-owned printer trying to fix a major paper jam. Contact Civil IT support for maintenance issues.

Plotters

CAE has two plotters for printing black-and-white documents larger than tabloid (11” x 17”) and/or color documents larger than letter (8.5” x 11”) in 1249 Engineering Hall and 1262 Mechanical Engineering. For more information, visit the CAE KnowledgeBase webpage.

Scanners

CAE does not maintain a scanner. The nearest scanners can be found at the Steenbock and MERIT libraries, or at the Info Lab on the second floor of Union South. Learn more about library scanners on the UW Libraries webpage. Wendt Commons, located across

from Engineering Hall, also has scanners that can be used for free by emailing .pdf documents to yourself. Learn more at the UW Libraries webpage.

Engineering and Student Software

- Info on software for CAE lab computers is found on the Computer-Aided Engineering website.
- Software on UW-owned computers may be different in labs and offices.
    - **Research lab computers** - Software varies by lab. Do not install software on lab computers without permission from your research adviser.
    - **Grad student office computers** - UW-owned computers in grad student offices come with the Windows operating system and Microsoft Office. Do not install software on office computers without permission from your research adviser.
- UW-Madison provides a variety of no-charge software through the campus software library. To learn more, visit the UW Information Technology website.
- DoIT also offers helpful software resources. To learn more, visit the UW IT Services webpage.

Computing Supplies

The sources and funding for computer supplies varies by research group. When in doubt, contact your research adviser. Please note that printing supplies come from specific vendors and are subject to State and UW purchasing restrictions.

Software Training for Students (STS)

Software Training for Students (STS) offers free training for students and instructors on the technology skills needed in the classroom and beyond. STS strives to offer training that is linked to degree-credit course work or future job placement and helps students stay current with software updates. STS is funded through the Student Information Technology Initiative fee, a portion of student tuition.

Campus Account Access after you Leave Campus

Once your appointment or student status changes, you will lose access to OneDrive and your license for Office 365 Subscription version of Office/Outlook desktop clients will expire approximately 25 days after the change. You will, however, still have access to your wisc.edu email account through MyUW.

- Steps to take before your access to Office 365, G Suite, Box, and Qualtrics changes are detailed on the KnowledgeBase webpage.
- Details on the deactivation timeline for various campus accounts are located on the KnowledgeBase webpage.

Where to go for Computer Help

Desktop PC's (CEE-Owned)	DoIT	CAE	Civil IT	Contact
Email - WiscMail	x			email help@doit.wisc.edu Call DoIT Help Desk 608-264-4357 Web support help
Network, can't connect			x	civilsupport@engr.wisc.edu
Software, install now			x	civilsupport@engr.wisc.edu
Software, troubleshoot existing			x	civilsupport@engr.wisc.edu
Repair			x	civilsupport@engr.wisc.edu
Viruses, spyware			x	civilsupport@engr.wisc.edu
Printers (CEE-owned)	**DoIT**	**CAE**	**Civil IT**	**Contact**
Needs Toner			x	civilsupport@engr.wisc.edu
Needs repair			x	civilsupport@engr.wisc.edu
Connecting to Printer			x	civilsupport@engr.wisc.edu
Laptops (personally-owned):	**DoIT**	**CAE**	**Civil IT**	**Contact**
Campus VPN	x			email help@doit.wisc.edu Call DoIT Help Desk 608-264-4357 Web support help, kb
CoE VPN		x	x	email helpdesk@cae.wisc.edu or civilsupport@engr.wisc.edu call 262-5349, web support helpdesk
Engineering Specific Software (e.g. Solidworks)		x		email helpdesk@cae.wisc.edu call 262-5349, web support helpdesk
Questions, general	x			email help@doit.wisc.edu Call DoIT Help Desk 608-264-4357 Web support help, kb.wisc.edu
Network, can't connect (wifi only)	x			email help@doit.wisc.edu Call DoIT Help Desk 608-264-4357 Web support help
Repair	x			email help@doit.wisc.edu Call DoIT Help Desk 608-264-4357 Web support help
Viruses, spyware	x			email help@doit.wisc.edu Call DoIT Help Desk 608-264-4357 Web support help
Campus Services	**DoIT**	**CAE**	**Civil IT**	**Contact**
NetID Account Questions	x			email help@doit.wisc.edu Call DoIT Help Desk 608-264-4357 Web support help
CAE Account Questions		x	x	email helpdesk@cae.wisc.edu or civilsupport@engr.wisc.edu call 262-5349, web support helpdesk
Campus Duo	x			email help@doit.wisc.edu Call DoIT Help Desk 608-264-4357 Web support help, mfa.wisc.edu
CoE Duo		x		email helpdesk@cae.wisc.edu or civilsupport@engr.wisc.edu call 262-5349, web support helpdesk
Microsoft Office	x			email help@doit.wisc.edu Call DoIT Help Desk 608-264-4357 Web support help
WiscMail/ Office 365	x			email help@doit.wisc.edu Call DoIT Help Desk 608-264-4357 Web support help

Engineering Media Services
Engineering Media Services maintains the media equipment in many of the College of Engineering conference rooms, classrooms, and labs. They also offer a variety of services and hands-on help to the engineering community. For help with CoE media equipment or to learn more, visit the Engineering Media Services website.

Advising & Mentoring

Advising relationships are a central part of academia, important to both the experience and development of students and faculty members alike.

The Graduate School's definition of an advisor can be found on the UW Policy Library webpage. Your advisor has two main roles: 1) To assist you in acquiring the highest possible level of knowledge and competence in the field, and 2) to chair the committee that will determine whether you have performed at an acceptable level in each of your degree milestones (see "Degree Requirements" section below for further information on building your committee). Other roles of your advisor may include tracking your progress in completing your degree (note: this may include use of the Graduate Student Tracking System) assisting with course selection and planning your academic path, and helping you identify possible research mentors, committee members, and research opportunities.

Both the student and advisor are responsible for making their expectations clear to each other. Be sure to discuss this with your advisor.

Finding & Selecting an Advisor

When graduate students are first admitted to an area of study within the EC&T program, they are either assigned to the faculty member providing their financial support or to the chair of graduate admissions within their area of study.

The name and contact information of your faculty advisor can be found in your Student Center on MyUW under "Academic Progress" and then "Advisors."

Changing Your Advisor

As the advisor-student relationship is one of mutual agreement, it may be terminated by either party. Changing advisors may be necessary due to changes in a student's interests or changes in the funding sources for support. Students should discuss an

advisor change with their current advisor and faculty in their area of study before officially requesting a change of advisor.

It is recognized that there are many reasons why a graduate student in an MS-research or Ph.D. degree program may wish to change their research advisor. Two of those reasons and their solutions are described below. Any student who is considering changing their faculty research advisor is encouraged to seek advice from the CEE Associate Chair for Graduate Studies or the Assistant Dean for Graduate Affairs in the College of Engineering.

- **Changing your advisor due to change in research interest:** A graduate student in an MS-research or Ph.D. degree program may change research advisors due to a change in research interest by:
    1. Initiating discussions with the proposed research advisor and obtaining assurance that the new research advisor is willing to accept the advising role. An existing research assistantship will not transfer with the student, so the student needs to obtain assurance from the proposed research advisor that a new research assistantship will be available to the student, if needed.
    2. Informing their current advisor of their wish to move to a different research program. The student, current advisor, and future advisor shall indicate agreement by completing the appropriate form located on the CoE Student Resources webpage. The signed form should be emailed to the Graduate Coordinator who will assist in obtaining department approval.

- **Changing your research advisor due to concerns about the research environment:** The Department and College expect that graduate student climate and culture is conducive to learning and research scholarship, innovation, and entrepreneurship. Graduate students who find themselves in an environment that does not meet those expectations, as substantiated through the course of an appropriate investigation, will be given the opportunity to continue their studies under a different faculty research advisor. In this case, the department will facilitate the transition by guaranteeing funding, as needed, to cover the student's stipend as well as research expenses (tuition remission costs and funds needed to conduct the research) for a period of up to one year. The student, current advisor, and future advisor shall indicate agreement by completing the "Add or Change Graduate Faculty Advisor Form."

Mentor/Mentee Expectations

Clearly defined expectations for both the student and advisor are a crucial starting point for a strong relationship. The CEE graduate program is guided by a set of baseline expectations for the conduct of students and faculty that help to establish a safe, collegial, and productive environment. These Graduate Assistantship Policies and Procedures reflect professional guidelines provided by the UW-Madison College of Engineering and the UW-Madison Graduate School Policies and Procedures for Project (PA) Teaching (TA) and Research (RA) Assistants. Individual laboratories in CEE may have additional or more specific guidelines/requirements.

Workload and Progress toward Degree

- Research mentors and mentees are expected to collaboratively develop a research program plan including a clear set of responsibilities and timeline required to make progress toward degree completion. The plan shall be developed at the outset of the appointment and as questions arise during the appointment. Graduate students are expected to acknowledge that they have the primary responsibility for successful completion of their degree.
- Mentors are expected to provide timely guidance on student progress, including course planning, qualifying exams, thesis proposal, thesis committee, thesis preparation and defense.
- Mentors are expected to provide annual performance evaluations for each mentee using the College of Engineering's Graduate Online Assessment and Achievement Learning System (GOAALS). Evaluations are expected to be individually reviewed with each student.
- Self-supported graduate students assigned to a research project are expected to recognize that responsibilities, workload expectations, and progress toward degree completion apply.
- Department staff is expected to assist graduate students with assistantships, payroll, benefits, work-related travel and purchasing, and reimbursements.
- Mentors are expected to recognize Graduate School policy that research assistant (RA) appointments are for performing work that is relevant to the student's course of study. Occasional other duties are not to exceed 5 hrs/week, regardless of percentage of RA appointment.
- Graduate students should expect that coursework, research, and assistantship duties amount to a full-time professional commitment. Students should recognize that fluctuations above and below the hours reflected in the appointment level are expected and that the pursuit of research may demand occasional periods of intense workload to meet important deadlines or to accommodate research

activity that falls outside of regular work hours (e.g., overnight travel or extended field study).
- Mentors are expected to support their student's success in their coursework, including recognition of temporary periods of intense coursework activity such as exam periods.
- Mentors and mentees are expected to follow university policies on work hours, leave, and vacation. Students are expected to coordinate absences, vacations, and religious observances with their advisors in advance.
- Students supported by teaching assistant (TA) appointments are expected to balance the time commitments to research and teaching after consultation with their advisor and the faculty member responsible for the course to which they are assigned.
- Mentors are expected to provide disability accommodations as approved by the McBurney Disability Resource Center during timed exams (e.g., the qualifying exam for Ph.D. students). Please work with your exam committee members and/or the director of graduate studies to address your specific situation.

Physical Environment

- The CEE Department and research groups are expected to provide adequate and safe work facilities. Examples include but are not limited to: access to a printer and copier, access to a computer or laptop, office/instructional supplies, software necessary for instructional tasks / job duties, a departmental mailbox, personal protective equipment, and access to equipment operation manuals, records of equipment safety inspection reports, appropriate lockout/tag out procedures, and hazardous chemical Safety Data Sheets (SDSs). Modes of access are expected to vary among research groups.
- Mentors and mentees are expected to collaboratively maintain a comfortable and clean working environment.
- Research advisors are expected to develop and maintain lab safety plans and to advise students of any required safety training. Safety guidelines will be followed at all times, including formal reporting of safety incidents and near misses via the College of Engineering Safety website.
- Mentors are expected to provide disability accommodations as approved by the McBurney Disability Resource Center.

Professionalism and Climate

- Mentors and mentees are expected to conduct research activities without plagiarism, with proper attribution of contributions from students and collaborators, and with respect for applicable professional ethical considerations.

- Mentors and mentees are expected to uphold UW-System policies and procedures in place for academic and non-academic misconduct.
- Mentors and mentees are expected to be responsive to communications, including a regular schedule of meetings and electronic communications during defined working hours.
- Mentors and mentees are expected to treat each other with mutual respect. Advisors will not display hostile and intimidating behavior and will participate in any required recurring training for HIB, bias, and professional ethics. Students should not expect or fear any form of retribution for reporting hostile and intimidating behavior.
- Mentors will uphold the University's statement on diversity (diversity.wisc.edu) and will treat students fairly and without bias.
- Mentees are expected to engage in professional development activities including documenting research, interacting with peers in their discipline, reading relevant publications, and for Ph.D. students, grant writing, and attending and presenting research at meetings and conferences. Advisors are expected to make an effort to secure and facilitate funding for such activities.
- Mentors are expected to help publish their mentee's work in a timely manner.

Degree Requirements for all Students

Graduate students are responsible for staying aware of the requirements for completing their graduate degree (e.g., credits, courses, milestones, learning outcomes/goals, etc.). All current degree requirements are located on the program's page in the *Graduate Guide*. Navigate to the website, then select "Degrees/Majors," your program's name, the "Named Option" of your program (if applicable; found near the bottom of the Requirements tab), and then "Requirements" from the navigation bar on the right side.

You will be taken to a subsection of your program's *Guide* page that contains all official requirements for your degree. Similarly, see "Policies" from the navigation bar of your program's page to learn about policies affecting these requirements (e.g., prior coursework, probation, credits per term allowed, time constraints, grievances and appeals, etc.). Note that when you look at the *Guide* to learn about program requirements, you will be viewing the current year's version. To find past versions of program requirements, see the Guide Archive and search for your program and the year you would like to reference.

Master's Degree Program

The MS degree is designed for students who have a strong background in chemistry and who desire graduate training in applying chemistry to environmental systems. Individual programs are tailored to meet the candidate's interests through the selection of specialized and elective courses. Areas of specialization include aquatic chemistry, air pollution chemistry, terrestrial chemistry, and chemical- and bio-technology development.

Master's Degree Requirements
Achieve your degree goals on time with guidance from the Graduate School and Guide.

Creating Your Master's Degree Plan
During the first semester of graduate study, students are required to develop a plan of courses with their advisor. Additional courses beyond the core courses may be included with approval of the student's academic advisor and the approval of the EC&T Academic Planning Committee (APC). APC is a three-member panel of current EC&T faculty who serve three-year staggered terms on the committee. Committee members review and make recommendations to program faculty regarding core courses, student exams, and degree requirements, and oversee all activities related to curriculum development and revision.

All incoming EC&T students should have basic preparation in the fundamental areas of general, organic, physical, and analytical chemistry. Students should also have previous coursework in the natural sciences, which can include botany, bacteriology, zoology, earth science, material science, or engineering. Note that CEE 500 (Water Chemistry) or equivalent material is a pre-requisite for many of the core EC&T courses. If these requirements have not been met prior to entering the program, this should be considered when planning the coursework.

The completed course requirement form should be emailed to your Graduate Coordinator with a copy sent to your faculty advisor. The EC&T form can be accessed and downloaded from the CoE's Current Student Resources Intranet with your NetID.

Important Steps for Completing Your Master's Degree

Please visit the Graduate School website for information on what you need to do and things you need to know to complete your master's degree.

Degree Warrant
Students should submit a final course requirement form and complete a warrant request form **at least three** weeks before they plan to defend their thesis. The final course requirements form must be fully signed by the student's committee before it is sent to the Graduate Coordinator. Forms are available through CoE's Current Student Resources Intranet with your NetID.

Master's Degree Defense
This is a thesis-track MS degree and requires a formal thesis.

Master's thesis committees must have at least three members, two of whom must be CEE graduate faculty or former graduate faculty within one year of their resignation or retirement. The EC&T policy can be waived by the program chair on case-by-case basis, although waivers must meet Graduate School minimum requirements for M.S. thesis committee composition, which may be viewed on the UW-Madison Policy Library website.

Generally, the student must submit a copy of their report or thesis at least seven days in advance of the oral exam (when required) to each committee member. If a shorter time is needed, the student must obtain permission from each member of the committee.

The student taking an oral exam is expected to prepare an approximately 30-minute formal presentation of their work. Computer projection can be used in the presentation and is typically recommended. The student will be expected then to defend the results of their work. A typical oral exam for a master's student lasts up to two hours.

The day before the exam, the student should notify the Graduate Coordinator to confirm the date. Degree warrants are now signed electronically, so your Graduate Coordinator will send an email notification to your faculty advisor/committee requesting signature. You should follow up to confirm that your warrant is signed. Following the exam or report review, the student is expected to make all appropriate corrections to their report or thesis in consultation with their advisor. An electronic copy of the completed thesis may also be required at the advisor's request and should also be sent to the Graduate Coordinator so they can upload it to Minds@UW (see below).

Master's Thesis Binding and Depositing
As part of the MS Thesis, each student is required to perform research in consultation with a faculty advisor. At the conclusion of the research program, a thesis must be submitted.

The thesis must: 1) conform to Graduate School and Library formats; 2) be approved by the advisor; and 3) be submitted in electronic format to your Graduate Coordinator, who will upload it into the Minds@UW, Department of Civil and Environmental Engineering Thesis Collection. The Minds@UW system provides a permanent URL address and safe long-term archival, and is indexed by Google, Google Scholar and other specialty academic search engines. The Minds@UW Electronic Thesis Submission Form can be found on the College of Engineering Intranet.

Students should also check with their faculty advisor to find out if they need to deposit their master's thesis at the Memorial Library, where it is catalogued and stacked for future reference.

As a courtesy, some students provide their advisors with bound copies but are under no obligation to do so. Printing and binding can be done through DoIT online at the UW-Madison Information Technology website.

Commencement

Students will receive an email message each semester from the Graduate Coordinator inquiring if they intend to graduate during the current term or not. Students must apply to graduate and indicate their intention to attend commencement. The College of Engineering also holds its own ceremony for all graduating students in spring and fall, in addition to celebratory events held on the department level. A campus-wide commencement celebration at Camp Randall is held in the spring only. These events typically require separate registration and details will be provided by campus, the College of Engineering, and the Civil and Environmental Engineering Department as they become available. For more information, visit the links below.

- UW-Madison graduate checklist
- Commencement FAQ
- College of Engineering Commencement

Financial Support

Once an MS thesis or report has been deposited at the Graduate School, a student is no longer eligible for financial support after the current term ends. If the student holds an assistantship or a fellowship, the student must consult with his or her advisor(s) and the payroll specialist to determine the end date of the appointment and its ramifications. Status as a student is terminated by the end of the semester in which the defense is accomplished, or at the end date of the appointment. Please contact the CEE payroll specialist if you have questions.

Doctoral Degree

The Doctor of Philosophy degree is the highest degree conferred by the University. It is a research degree and is never conferred solely for any prescribed period of study, no matter how faithful. The degree is only granted on evidence of general proficiency, distinctive attainment in a special field, and, particularly, the ability for independent investigation as demonstrated in a dissertation presenting original research or creative scholarship with a high degree of literary skill. If necessary, students should consult with their faculty advisor, members of their committee, or campus resources about improving their technical writing and presentation abilities.

Basic requirements for a Ph.D. degree in environmental chemistry and technology include: (1) Ph.D. Major Coursework; (2) Ph.D. Minor Coursework; (3) Preliminary Examination; (4) Dissertation Research; and (5) Final Oral Examination.

Students must achieve an average grade of B or better in all coursework, excluding research credits (overall GPA of 3.00 or higher).

Timeline & Essential Steps for Ph.D. Degree Progress

A list of major milestones and steps to take for the successful completion of a Ph.D. degree based on a five-year timeline is available on the College of Engineering Intranet in the “PhD Progress to Degree Timeline” document. Please refer to this document for information on the preliminary exam and final defense as well as details regarding the warrant submittal process. Please note: An individual student’s timeline and specific requirements may vary slightly, so please discuss any concerns with your faculty advisor.

Ph.D. Major Coursework

Students are required to develop a plan of courses with their advisor and with the EC&T Academic Planning Committee (APC). Students meet with APC during their first semester to develop plans for coursework. APC is a three-member panel of current EC&T faculty who serve three-year staggered terms on the committee. Committee members review and make recommendations to program faculty regarding core courses, student exams, and degree requirements, and oversee all activities related to curriculum development and revision.

The Graduate School minimum Ph.D. credit requirement is 51 credits (including minor credits), maintaining a cumulative grade point average (GPA) of 3.00 (on a 4.00 scale). Out of the minimum 51 credits, 32 graduate credits (including minor credits) must be residence credits. The 32 graduate residence credits (including Ph.D. minor

coursework) must be completed prior to achieving dissertator status (for students who have earned an MS degree, credits accumulated for the MS may be applied towards this requirement, if approved by the faculty advisor). Pre-dissertators will enroll in course number, 890 Pre-Dissertator Research. Once the preliminary exam is passed and dissertator status is granted, the student will enroll in course number 990, Dissertator Research. The minimum 51 credits may include formal graded graduate level courses, research sections, independent study sections, seminars, and minor coursework.
All graduate students must register for a one-credit seminar course each academic year; students will discuss seminar options with faculty advisors. For more info, visit the Civil and Environmental Engineering PH.D. Guide.

Major and minor coursework forms are available on the College of Engineering Intranet with your NetID.

Students may request to complete the MS degree on the way to Ph.D. with advisor approval. To do this, students will complete and submit the Add/Change Program (within the same department) approval form located on the College of Engineering Intranet.

Minor Coursework
The purpose of the minor is to add breadth to a Ph.D. major. Monitoring the course content and credit requirements for Ph.D. minors is the responsibility of the minor department/program. Major departments/programs are responsible for indicating the expected minor (either Option A, B, or C; see below) at the time of the preliminary warrant request. A Ph.D. minor agreement form must be approved before, or by the time, the student has completed 6 of the total credits for the minor. The form can be accessed through the College of Engineering Intranet with your NetID and must be submitted to the Student Services Office when complete.

- Option A (External): Requires a minimum of 9 credits in a single department/program. Selection of this option requires the approval of the minor department/program.
- Option B (Distributed): Requires a minimum of 9 credits in one or more departments/programs and can include course work in the major department/program. Selection of this option requires the approval of the major department/program.
- Option C (Graduate/Professional certificate): Requires successful completion of a Graduate/Professional certificate in a program outside of the student's doctoral major program.

Students must achieve a GPA of 3.0 (An average grade of B or better) in all minor coursework. Additional information about doctoral minors is available in the Graduate Guide.

Doctoral Committees

EC&T follows the Graduate School requirements for Graduate committees, with several clarifications. The Graduate Committee Composition Policy is detailed online at the UW Policy Library website.

The EC&T Program Director can act on behalf of the EC&T PhD program's Executive Committee to approve the composition of all Ph.D. committees. The EC&T Graduate Program Chair, on behalf of the EC&T Executive Committee, must approve committee members who are not graduate faculty. The EC&T Program Chair must sign the "Ph.D. Final Oral Committee Approval Form", thus representing the approval of the EC&T Executive Committee before the form is submitted to the Graduate School for final approval. The forms for CEE, GLE, and EC&T committees are located on each respective tab of the student resources section on the College of Engineering Intranet.

Assessments and Examinations

Doctoral students are required to take a comprehensive preliminary exam by the end of their fifth semester of study in the Ph.D. program. A final oral exam of the doctoral dissertation is required. Deposit of the doctoral dissertation in the Graduate School is required.

Preparing for Your Preliminary Exam

- Turn in proof of committee-approved major coursework form and internally or externally approved minor to your Graduate Coordinator at least three weeks prior to the preliminary exam.
- Candidate must have completed, or be in progress of completing, 32 residency graduate credits and completed or be in the progress of completing minor coursework.
- The Graduate Coordinator requests that students submit the following forms to prepare for a preliminary examination (forms located on College of Engineering Intranet):
    - EC&T Ph.D. Course Requirements Form
    - EC&T Ph.D. Minor Agreement Form
    - EC&T Ph.D. Preliminary Exam Warrant Request Form

Ph.D. Preliminary Examination Requirements

Ph.D. candidates are required to successfully pass a preliminary examination before the end of their fifth semester as a Ph.D. student to reach dissertator status.

The EC&T Preliminary Examination Committee is comprised of five committee members that meet the requirements of the UW-Madison Graduate School, and the committee must include at least three members of the EC&T Faculty Committee. The remaining committee members may be members of the EC&T Faculty Committee or other tenure-track or tenured faculty members of other departments at UW Madison. One of the five required committee members may be a tenured or tenure-track faculty member at another university or qualified researcher, scientist or engineer that is not a tenure-track, or tenured member of the UW-Madison faculty. The requirements for the non-UW Madison tenure or tenure-track Ph.D. committee member is defined by the UW-Madison Graduate School. If warranted by the subject matter of the preliminary examination, committee members beyond the required five may serve on the committee at the discretion of the faculty advisor as a non-voting member. Note: UW-Madison policy requires at least four members, but the EC&T Program requires five.

The EC&T Ph.D. Preliminary Examination has written and oral components. The written component consists of an original research proposal written by the Ph.D. candidate in the format of a Nation Science Foundation (NSF) proposal. The written proposal should be provided to the EC&T Preliminary Exam Committee at least two weeks prior to the exam. The student should make a 30 to 40-minute oral presentation to the committee and be prepared to answer questions about the proposal, the student's doctoral research and thesis plans, as well as background in environmental chemistry and technology.

Ph.D. candidates should work with their advisor to select an appropriate topic for their EC&T Preliminary Exam that fits within one of two categories:

- **Thesis Research Proposal:** A thesis research proposal covers the proposed research that would be pursued as part of the candidate's doctoral thesis and should be completed after the candidate's thesis plans are developed and some preliminary data is generated by the candidate. A thesis research proposal should be submitted before the student has published research that will be included in their thesis.

- **Future Research Proposal:** A future research proposal covers research that builds on the candidate's thesis research but does not include research that will be conducted as part of the candidate's thesis. The concept of the future

research proposal would be the research a candidate would like to pursue after completing their thesis. A future research proposal exam should be submitted after the candidate's first complete doctoral manuscript is submitted for publication or is published.

A Ph.D. candidate is responsible for making sure the EC&T Preliminary Examination Committee understands the requirements of the preliminary examination and the relationship of the proposal to the candidate's doctoral research. In addition, the Ph.D. candidate is responsible for working with the EC&T Graduate Coordinator to request a warrant for their EC&T Preliminary Examination. The warrant request for the preliminary examination should be made to the EC&T Graduate Coordinator at least three to four weeks before the exam and after an exam date and committee has been selected. Please include your coursework approval form when you email the warrant request form.

Preliminary Exam Proposal Format
The proposal should meet the general requirements for proposals submitted to the National Science Foundation (NSF), as indicated in the NSF webpage.

The proposal should not be submitted using the NSF FastLane system. The budget and administration requirements will be simplified. Ignore the NSF cover pages, NSF Table of Contents, and the Current and Pending Support Form. Likewise, include only results in journal manuscript format in the appendix of your proposal. All other aspects of the proposal with respect to formatting and organization should follow NSF instructions.

The proposal should summarize current research being performed and future research to be completed as part of the thesis. Papers already completed as a part of thesis progress should be included in an appendix to the proposal. Current results supporting the objectives or hypothesis of the proposal should be part of the main body of the proposal.

The basic outline of the proposal should be as follows:

- Cover page (do not include)
- Project Summary (1 page max)
- Table of Contents (no specific format)
- Project Description (15 pages max)
- Reference Cited (no page limit)
- Biological Sketch (PI only, which must be person taking exam)
- Proposed Budget (for each year and a cumulative budget)
- Budget Justification (1 page max)

- Facilities, Equipment and other Resources (do not include)

Discuss budget requirements with your advisor. Additional information on preparing a budget can be obtained from the UW-Madison Research and Sponsored Programs (RSP) webpage. Please note that this webpage contains a budget development tools that may be helpful.
Any student publications to date should be attached to the proposal.

Dissertator Status
Upon successful completion of the oral preliminary exam defense, the student should notify the Graduate Coordinator. They will request warrant signatures from committee members using the Graduate School e-signature system. Students then must enroll for exactly 3 credits (usually 990 research and seminar) for that semester. Students will receive an email notification from the Graduate School to verify when dissertator status becomes effective. Start dates are dependent on semesters.

Removal of Dissertator Status
A dissertator who enrolls for more (or fewer) than 3 credits will be removed from dissertator status for the fall or spring term in which the enrollment is not exactly 3 credits. To learn more, visit the UW-Madison Policy Library website.

Final Warrant for Ph.D.
The doctoral candidate should complete the "Ph.D. Final Oral Committee Approval Form" and email it to their faculty advisor for signature. The signed form should be emailed to the Graduate Coordinator who will assist in obtaining department approval prior to submitting it to the Graduate School. The EC&T Director of Graduate Study must sign the "Ph.D. Final Oral Committee Approval Form," thus representing the approval of the EC&T Faculty Committee. This form is available through the CEE Intranet. Once submitted, the Graduate School reviews and approves the composition of the committee and sends back final information that the student uses to finish the administrative details of graduation.

Final Examination/Defense for Ph.D.
Attainment of a Ph.D. degree requires the preparation of a dissertation on a research topic selected by common agreement between the student and the advisor. Once a research project is selected, the student must choose their final oral exam committee (typically their preliminary examination committee) under the following guidelines:

1. Like the preliminary exam, the final oral examination committee is comprised of five members that meet the requirements of the UW-Madison Graduate School,

and the committee must include at least three members of the EC&T faculty or former UW-EC&T faculty up to one year after resignation or retirement. The remaining two committee members must be from outside of the student's major program or major field (often from the minor field). One of the two may be a tenured or tenure-track faculty member at another university or qualified researcher, scientist or engineer that is not a tenure-track, or tenured member of the UW-Madison faculty. The requirements for the non-UW Madison tenure or tenure-track Ph.D. committee member are defined by the UW-Madison Graduate School. If warranted by the subject matter of the preliminary examination, committee members beyond the required five may serve on the committee at the discretion of the faculty advisor as a non-voting member. Note: UW-Madison policy requires at least four members, but the EC&T Program requires five.

2. The required fourth and fifth members of the EC&T doctoral committee/final oral examination committee as well as any additional members, all retain voting rights. They may be from any of the following categories, as approved by the program executive committee (or its equivalent): graduate faculty, faculty from a department without a graduate program, academic staff (including emeritus faculty), visiting faculty, faculty from other institutions, scientists, research associates, and other individuals deemed qualified by the executive committee (or its equivalent).

3. At least 3 committee members of all doctoral/final oral examination committees must be designated as readers.

4. To receive a doctoral or master's degree, students cannot receive more than one dissenting vote from their committee on the final degree warrant.

5. Doctoral degree recipients must acknowledge in the dissertation contributions received from other individuals, including co-authors of published work that appears in the document, such as in designing the research, executing the research, analyzing the data, interpreting the data/research, or writing, proofing, or copyediting the manuscript.

6. The chair or co-chair of the committee must be graduate faculty from the student's program. The UW–Madison Faculty Policies and Procedures 3.05B stipulates that "the faculty of the Graduate School includes all university faculty defined in 1.02 holding professional rank (professor, associate professor, assistant professor or instructor) in any department with graduate program authority, including those with zero-time appointments in such departments."

Committee members who have retired or resigned from the University automatically retain graduate faculty status for one year; after one year they are permitted to serve as co-chair or other non-graduate faculty committee member. The co-advisor/co-chair will be designated on dissertation documentation.

A Guide to Preparing your Doctoral Dissertation
Please visit the UW Graduate Programs & Services website for information provided by the Graduate School about producing your dissertation, format requirements, degree deadlines, samples, and additional guidelines.

Final Oral Defense
This examination requires a demonstration of the unique contributions of the research and a defense of the methods used and conclusions drawn. The student is required to give a public presentation, followed by defense of his/her research with the dissertation committee. Please notify the Graduate Coordinator the day before the final defense so that they can request warrant signatures.

Commencement
Students will receive an email message each semester from the Graduate Coordinator inquiring if they intend to graduate during the current term or not. Students must apply to graduate and indicate their intention to attend commencement. The College of Engineering also holds its own ceremony for all graduating students in the spring and fall, in addition to celebratory events held on the departmental level. A campus-wide commencement celebration at Camp Randall is held in the spring only. These events typically require separate registration and details will be provided by campus, the College of Engineering, and the Civil and Environmental Engineering Department as they become available. For more information, visit the links below.

- UW-Madison Graduate Checklist
- Commencement FAQ
- College of Engineering Commencement

Financial Support
A student is no longer eligible for financial support at the end of the term during which the dissertation has been deposited at the Graduate School. If the student holds an assistantship or a fellowship, the student must consult with his or her advisor and the payroll specialist to determine the end date of the appointment and its ramifications. Status as a student is terminated by the end of the semester in which the final oral defense is accomplished or at the end date of the appointment. See the department's payroll specialist with any questions.

DOCTORAL MINOR

The doctorial minor is taken by students outside of the EC&T Program. Requirements can be found in the Environmental Chemistry and Technology, Doctoral Minor Guide.

Enrollment Requirements

You are responsible for following Graduate School policies related to course enrollment requirements and limitations:

Adding / Dropping Courses

Auditing Courses

Canceling Enrollment

Continuous Enrollment Requirement for Dissertators

Enrollment Accountability

Enrolling and Registering for Classes

Students can register for courses by visiting the "Course Search and Enroll" within the MyUW portal. Guidance on how to enroll is available on the Office of the Registrar's website.

Full-time Enrollment

The Graduate School considers full-time enrollment depending on the semester. For fall and spring semesters, 8-15 graded credits taken at 300 or above graduate-level credits is considered full time. For the summer term, 4-12 credits is considered full time. All semesters exclude pass/fail and audit classes from the semester credit count. Any exceptions to the maximum credit load permitted must be obtained via an Overload Request form (see Academic and Enrollment Forms below).

If students elect not to enroll full-time as defined by the Graduate School, they are responsible for knowing about possible obligations that may require full-time status. Such obligations include visa eligibility, fellowships, assistantships, external funding agencies, and program satisfactory progress requirements. Students should enroll for the highest number of credits they need. For more information, visit the UW Policy Library website.

Minimum Enrollment
Non-dissertators' minimum credit load is 2 credits during the fall and spring semesters. Master's degree students expecting a summer degree must enroll in a minimum of 2 graduate credits. For details, visit the UW Policy Library website.

Dissertators
Dissertators must enroll in exactly 3 credits directly related to their dissertation (generally research and thesis or required seminars) during fall and spring semesters. Dissertators are considered full-time at 3 credits. Dissertators who are summer RAs, or who expect to graduate in summer, must enroll in the 8-week general session for 3 credits. Additional courses for credit, audit, or pass/fail will result in removal of dissertator status and tuition assessment at the regular graduate rate. For more information, visit the UW Policy Library website.

Academic and Enrollment Forms
A variety of forms and guidance to assist with enrollment can be accessed online at the Graduate School website. Specific topics of interest include:

- Add/change program
- Credit overload
- Late initial enrollment form
- Late course add and drop
- Degree completion fee request
- Transcript request
- Withdrawal

Graduate School Academic Policies
The EC&T Program follows the guidelines and policies of the graduate school unless otherwise noted. The Graduate School's Policies and Procedures glossary can be accessed online at the UW Graduate Programs & Services website.

Get on the Wait List for a Closed Course
Guidance on how to get on the wait list for a full course is located on the KnowledgeBase webpage.

Pass/Fail Requests
Pass/fail courses do not satisfy any Graduate School credit, coursework, or degree requirements, nor do they fulfill minimum or maximum credits required each term. Tuition is still charged for pass/fail courses. For these reasons, very few graduate students choose pass/fail for courses numbered 300 or above. Seminars, independent study, and research may not be taken pass/fail. The pass/fail option is not to be confused with the S/U (Satisfactory/Unsatisfactory) grading option. For more information, visit the UW Policy Library website.

Buying Textbooks
Textbooks can be purchased online from the University Book Store (UBS) website at or in person at 711 State Street (on the Library Mall, west of Lake Street, across from the Memorial Library). Please review any course requirements for textbooks before purchasing.

Requesting Transcripts
Guidance on how to request transcripts is located at the links below.

- Official vs. unofficial transcripts
- Ordering official transcripts
- Ordering unofficial transcripts

Re-Entering Graduate School
If you were enrolled as a graduate student but have had a break in enrollment for a minimum of a fall or spring term, you will need to re-apply to resume your studies. The Graduate School requirements for re-entry are available at the UW Graduate Programs & Services website.

Before applying online, please ask your previous faculty advisor to contact/e-mail the CEE Graduate Coordinator in Student Services. They will need to verify that they would like the Graduate Admissions Committee to review your application and also verify that they are willing to advise you if you are re-admitted. Please abide by the CEE department application deadlines for the appropriate term.

Satisfactory Academic Progress

Your continuation as a graduate student at UW-Madison is at the discretion of your program, the Graduate School, and your faculty advisor. Any student may be placed on probation or dismissed from the Graduate School for not maintaining satisfactory academic progress, and this can impact your academic standing (detailed below), financial aid (see this policy page on the UW Policy Library website), or funding (consult your sources of funding, as applicable).

Our program has its own definition of satisfactory academic progress and related procedures that supplement Graduate School policy, as described in this section.

All graduate students are expected to meet both the Graduate School's minimum policies, requirements, and satisfactory progress and the Department of Civil & Environmental Engineering's program-specific requirements, including those for course grades, GPA, attendance, incomplete grade resolution, and continuous enrollment.

Information about how the Graduate School determines satisfactory academic progress can be found on this policy page of the UW Policy Library website. In addition to the Graduate School's monitoring of satisfactory academic progress, the CEE Department reviews the satisfactory academic progress of its students. Key aspects of satisfactory progress in the CEE Department include:

- Satisfactory progress in research is defined by the student's research advisor. Students are expected to meet suggested timelines for milestone completion and meet with advisors regularly to discuss academic progress.
- Ph.D. students will follow the timeline towards milestones and satisfactory progress provided in the Timeline & Essential Steps for Degree Progress section of Ph.D. Degree Requirements in this handbook. Additionally, Ph.D. students are required to complete a self-assessment, the Graduate Online Assessment & Achievement Learning System (GOAALS), every spring semester. Research advisors independently complete a GOAALS assessment of each Ph.D. student's progress.
- Civil & Environmental Engineering programs require that students maintain a GPA of 3.0 in all courses taken as a graduate student (excluding research, audit, credit/no credit, and pass/fail courses), unless probationary admission conditions require higher grades following the graduate school grading system. The Graduate School also considers Incomplete (I) grades to be unsatisfactory if they are not removed during the subsequent semester of enrollment; however, the instructor may impose an earlier deadline.
- A student may be placed on probation or suspended for low grades or for failing to resolve incompletes in a timely fashion. In special cases, the Graduate School permits students who do not meet the minimum standards to continue their studies on probation, upon recommendation and support from their advisor. The Graduate School's probation policy can be found online at the UW Policy Library website.

The department requires satisfactory progress to continue guaranteed funding support. A student's failure to comply with the expectations mentioned above for satisfactory progress may result in disciplinary action or dismissal.

Personal Conduct Expectations

Professional Conduct

The Office of Student Conduct and Community Standards maintains detailed guidance on student rights and responsibilities related to learning in a community that is safe and fosters integrity and accountability. You are responsible for keeping aware of their policies and procedures.

This graduate program, the Graduate School, and the Division of Student Life all uphold the UW-System policies and procedures in place for academic and non-academic misconduct. In addition, graduate students are held to the same standards of responsible conduct as faculty and staff. Furthermore, unprofessional behavior towards clients/subjects, faculty, staff, peers, and public are significant in the evaluation and promotion of students. In turn, we hold expectations for the highest level of academic integrity and expect professional, ethical, and respectful conduct in all interactions.

Concerns about infractions of Professional Conduct may be handled informally between the instructor/advisor and the student. If a resolution is not achieved, a graduate program representative may be consulted. Students may be disciplined or dismissed from the graduate program for misconduct or disregard for professional conduct expectations regardless of their academic standing in the program. Separate and apart from a violation of Professional Conduct, a student may face University disciplinary action regarding the same action. Students are responsible for reading the information here as well as the information published on all the relevant web sites. Lack of knowledge of this information does not excuse any infraction.

1. **Professional Ethics:** Students shall show respect for a diversity of opinions, perspectives and cultures; accurately represent their work and acknowledge the contributions of others; participate in and commit to related opportunities; aim to gain knowledge and contribute to the knowledge base of others; understand the UW Student Code of Conduct; represent their profession and the program; and strive to incorporate and practice disciplinary ideals in their daily lives. Resumes/CVs must reflect accurate information.
2. **Honesty and Integrity:** Students shall demonstrate honesty and integrity as shown by their challenging of themselves in academic pursuits; honesty and ethics in research and IRB applications—including honesty in interpretation of data, commitment to an unbiased interpretation of academic and professional endeavors; and the need to document research activities, protect subject/client confidentiality and HIPAA regulations. Students shall follow-through and pull their

weight in group activities and understand where collaboration among students is or is not allowed; not plagiarize others or past work (self-plagiarism), cheat, or purposefully undermine the work of others; and avoid conflicts of interest for the duration of their time in the program. As a professional, honesty and integrity also extends to personal behavior in life outside of the academic setting by realizing that students are representatives of the program, UW-Madison, and the profession.

3. **Interpersonal and Workplace Relationships:** Students shall interact with peers, faculty, staff and those they encounter in their professional capacity in a manner that is respectful, considerate, and professional. This includes and is not limited to attending all scheduled meetings, honoring agreed upon work schedules, being on-time and prepared for work/meetings, contributing collaboratively to the team, keeping the lines of communication open, offering prompt response to inquiries, and employing respectful use of available equipment/technology/resources. Chronic or unexplained absences are unprofessional in the workplace and could be grounds for termination or removal of funding. To facilitate the free and open exchange of ideas, any criticism shall be offered in a constructive manner, and the right of others to hold different opinions shall be respected.
4. **Commitment to Learning:** Students are expected to meet their educational responsibilities at all times. Be actively prepared for class and be ready for questions and answers. Be on time for every class and always show courtesy during class or if you have to leave class early. If possible, students should notify the instructor at least one day in advance of a planned absence. Students who are unable to attend class are responsible for finding out what occurred that day and should not expect instructors to give them individual instruction. Recognizing that the pursuit of knowledge is a continuous process, students shall show commitment to learning by persevering despite adversity and seeking guidance in order to adapt to change. Students shall strive for academic excellence and pursue and incorporate all critique, both positive and negative, in the acquisition of knowledge in order to understand and respect the community in which they work.
5. **Professional Appearance:** Students shall convey a positive, professional appearance in order to represent the program in a dignified manner. Appearance includes a person's dress, hygiene, and appropriate etiquette/protocols for the environment (including safety protocols and protective clothing in environments that require them).

Academic Misconduct

Academic misconduct is governed by state law, UW System Administration Code Chapter 14. For further information on this law, what constitutes academic misconduct, and procedures related to academic misconduct, see:

The Graduate School

Academic Policies & Procedures: Misconduct, Academic

Office of Student Conduct and Community Standards

Academic Misconduct Website

Non-Academic Misconduct

Non-academic misconduct is governed by state law, UW System Administration Code Chapters 17 and 18. For further information on these laws, what constitutes non-academic misconduct, and procedures related to non-academic misconduct, see:

The Graduate School

Academic Policies & Procedures: Misconduct, Non-Academic

Office for Student Conduct and Community Standards

Non-Academic Misconduct Website

University of Wisconsin System (UWS)

Chapter 17: Student Non-Academic Disciplinary Procedures
Chapter 18: Conduct on University Lands

Research Misconduct

Graduate students are held to the same standards of responsible conduct of research as faculty and staff. Further information about these standards and related policies and procedures can be found at:

The Graduate School

Academic Policies & Procedures: Responsible Conduct of Research

Office of the Vice Chancellor for Research and Graduate Education

Research Policies

Hostile and Intimidating Behavior (Bullying)

Hostile and intimidating behavior (HIB), sometimes referred to as “bullying,” is prohibited by university policy applicable to faculty, academic staff, and university staff.

Undesired consequences of hostile and intimidating behavior can be avoided or minimized when the problem is addressed early on, but victims are often hesitant to pursue a formal process before the impact is severe. Educational opportunities and campus resources have been implemented to aid all employees and students in defusing situations before they become severe. These resources, including trained personnel who can advise and mediate, comprise the “informal process.”

It is possible that situations will continue to arise in which informal interventions are not effective, and the “formal process” has been designed to address those situations.

You are encouraged to seek out advice and consultation after the first instance of hostile and intimidating behavior. Keep in mind, consultation is not escalation, and we are here to help. Discussing what’s happened in a timely way can often prevent continued bullying. Here are some ways to do this:

- Keep notes of what happened, when, where, and who was present. Retain copies of any correspondence.
- Seek advice from a trusted colleague or get in touch with an HIB liaison who can serve as a confidential source of guidance
- Consult with resources (either local or campus) to gather information on options for an informal resolution.
- Seek informal resolution by approaching the individual yourself or with an intermediary
- Consult your advisor, human resources representative, department chair, director, dean, or any campus resource to discuss options for resolution. In the CEE Department these contacts include:
    - Associate Chair for Graduate Programs, Professor Christy Remucal
    - CEE Department Chair, Professor Greg Harrington
    - College of Engineering Assistant Dean for Graduate Affairs

If you are a graduate student who is experiencing hostile and intimidating behavior, you are entitled to support as a university employee through the Ombuds office, the Dean of Students office, and the Graduate School, among others.

For further definition, policy, and procedures related to HIB, visit the UW Hostile and Intimidating Behavior website. Students who feel they have been subject to HIB are encouraged to review the informal and formal options on the "Addressing HIB" tab of this website.

Grievance Process

Students who feel that they have been treated unfairly have the right to a prompt hearing of their grievance. Such concerns may involve course grades, classroom treatment, advising, harassment, and other issues.
Each college or program on campus has a grievance process that students can use to address other concerns regarding their experience in the program. This program's grievances and appeals process and related policies can be found detailed at the links below:

- Environmental Chemistry and Technology, Research, M.S.
- Environmental Chemistry and Technology, Ph.D.

Incident Reporting (Hate, Bias, Sexual Assault, Hazing, Students of Concern, Bullying)

The Dean of Students Office maintains a portal to report incidents of hate, bias, sexual assault, hazing, dating/domestic violence, stalking, missing students, and students displaying other concerning behaviors at UW-Madison:

Dean of Students Incident Reporting

As noted above in "Personal Conduct Expectations," students who feel they have been subject to hostile and/or intimidating behavior (i.e., bullying) are encouraged to review the informal and formal options for addressing this behavior (including filing complaints when desired) at:
Human Resources Hostile and Intimidating Behavior Website

Sexual Harassment and Assault

The Sexual Misconduct Resource and Response Program (formerly called the Title IX Program) is overseen by the Title IX Coordinator. The Program receives reports of sexual harassment and sexual violence – including sexual assault, dating/domestic violence, stalking, and sexual exploitation – and coordinates the University's response.

What to do if you've been sexually harassed:

- Seek advice - Consult a trusted colleague, the CEE Department Administrator, CEE Graduate Student Coordinator, department chair, Title IX Coordinator, an HIB liaison or another campus resource to discuss options for resolution.

- Seek informal resolution or file a sexual harassment complaint. Information and support for students can be accessed online at the UW Office of Compliance website.

Funding, Employment, and Finances

"Funding" is a term used to describe university employment or support to cover some or all of your costs of graduate education. It varies in kind, amount, and level of guarantee.

The Civil and Environmental Engineering Department offers several different types of financial support for graduate students. Three common types of financial support are Project Assistantships, Research Assistantships, and Teaching Assistantships (PA/RA/TA, respectively).

PAs, RAs, and TAs with at least a 33.33% appointment are eligible to receive tuition remission. Please note that even students who receive tuition remission are still *required to pay segregated fees* by the tuition due date. The amount charged for segregated fees is based upon the number of credits the students is enrolled in. Detailed information about segregated fees can be found online at the UW Bursar's Office website.

Grants Information Collection
The Memorial Library has a Grants Information Collection, which consists of print and online resources to assist students in finding external funding, grants, scholarships, and fellowships. Students may make individual appointments with a grants librarian to customize their fellowship search.

Becoming a TA, RA, or TA

Applying for Teaching Assistantships
Any graduate student in the College of Engineering may apply for a TA position in CEE except for accelerated master's degree students. First consideration will be given to CEE Graduate Students. In selecting applicants, the department will consider applicants' preparation and achievement in relevant subjects and their potential to be effective teachers for UW-Madison undergraduates. If no qualified CEE student is available, the department will open the search to include applicants from other departments and

programs. Professors in the courses seeking TAs will review applications and make a recommendation to the Department Chair.

Expectations of Teaching Assistants
All new TAs must attend the College of Engineering New Educators' Orientation (NEO) organized by the Engineering Learning Center. More information about the NEO workshop is available at the UW CEETE website.

TAs will receive student evaluations using the College of Engineering Teaching Evaluation Form. The department recommends that supervising faculty evaluate TAs during the fifth or sixth week of their first two semesters. The evaluation will usually involve a planned visit to a classroom/lab section and a subsequent conference between the TA and the faculty member.

Applying for Research Assistantships
Students should contact professors in their area of interest. Professors decide whom they will appoint on their research grants.

Expectations of Research Assistants
It is important for research assistants to remember that research data are the property of UW-Madison.

Applying for Project Assistantships
Project assistant opportunities on campus are posted online on the UW-Madison Jobs website. Each PA posting on the jobs website will state who to submit a resume to.

Enrollment Requirements for PAs, RAs, and TAs

For information on minimum enrollment requirements visit the UW-Madison Policy Library website.

Other Graduate School policies related to graduate student funding/employment:

Maximum Levels of Appointments
Concurrent Appointments for Fellows/Trainees
Eligibility for Summer RA, TA, PA, and LSA Appointments

Assistant Rates for PAs, RAs, and TAs

The CEE Department uses a common rate structure consistent with college and campus requirements to set stipends for RAs, TAs, and PAs. All graduate assistantships rates are at or above the campus minim. Below is a summary of the rates and guidelines for identifying the appropriate level. All are based on a standard 50% appointment for 12 months.

Please contact your advisor, the CEE payroll specialist, or CEE department administrator with any questions regarding graduate assistantship rates and the designated level for your program status.

CEE Rate Structure and Protocols for Stipends, July 1, 2023 – June 30, 2024

Tier	Description	Annual stipend for 50% appointment	Typical RA Status	TA/PA
Level 4	NSF fellowship equivalency	$37,000	Students who have finished a major external fellowship, such as the NSF GRFP	
Level 3	CoE senior RA rate	$34,500	PhD students with dissertator status	
Level 2.1	CEE Level 2 (10% over F23 WDGF equivalency)	$31,900	PhD students who have passed quals or are previous WDGF or AOF recipients	Experienced students ("senior")
Level 2	WDGF equivalency	$30,000		
Level 1	CoE standard TA/PA/RA rate	$31,000	New students ("standard") and academic appointments.	New students ("standard"). TA appointments are typically academic.

Finding Funding Without a Guaranteed Appointment

To help you find resources to pay for costs related to graduate education, the Graduate School provides a comprehensive overview of the funding process on campus as well as descriptions of the types of funding available, sources of funding, minimum stipend rates and benefits, and links to applicable human resources policies (e.g. GAPP) at:

Graduate School: Funding and Financial Aid

External Fellowship Database

Health Insurance

University Health Services offers high-quality medical care to all UW–Madison students. Most fee-based services at UHS are covered at no cost for members of the UW–Madison Student Health Insurance Plan (SHIP). Eligibility, benefits, rates, and other information related to SHIP is available for viewing on the website.

PAs, RAs, TAs, and fellows holding a minimum 33.33% appointment are eligible for group health insurance through the University in which the University pays most of the premium. To activate your insurance benefits, you must see the Department's payroll administrator. There is a 30-day enrollment period, so you are encouraged to take care of this as soon as possible.

Tax Information

All PA, RA, TA, and fellowship income is subject to federal and state income tax. However, only PAs, RAs, and TAs have taxes withheld from their checks; fellows do not. Only TAs are subject to social security tax (but these can be waived if the student submits a Student Enrollment Verification form). Students may want to save receipts for school fees, books, and supplies in case they are able to claim tax deductions for them. Tax withholding (W4) forms are available from the Department's payroll administrator or online through MyUW. For questions regarding specific tax situations, students are encouraged to contact the Internal Revenue Service or a tax advisor. UW-Madison does not provide tax advice.

Tax Information for International Students

Non-US residents from countries with which the US has a tax treaty may be tax exempt. All international graduate students are required to attend a Tax Workshop for International Visitors sponsored by Employee Compensation and Benefits Services.

Parental Leave Policy for Graduate Student Assistants

The College of Engineering (CoE) and the Department are fully committed to providing a climate of support for graduate students who choose to have children during their graduate studies. The goal of this parental leave policy is to reduce academic and financial hardships for a) graduate students during the late stages of their pregnancy, childbirth, and postpartum periods, and b) any graduate student who is a new parent.

All CoE graduate students with current research, teaching, or project assistantships in CoE are eligible to request a parental leave under this policy. This applies to all graduate students of all genders, all sexual orientations, and all family structures. Upon request, graduate students who are pregnant will be provided with 12 weeks of paid accommodation time for childbirth. Other new parents (non-gestational) will, upon request, be provided with 6 weeks of paid accommodation time. There will be no research or teaching expectations of the student during the leave.

Students should ideally notify their department (through the Department Administrator or Department Chair) six months prior to the expected birth or adoption to request the leave. Students should alert their research advisor or TA coordinator at that time as well to ensure that the ongoing research and teaching environment is safe for the student who is pregnant. It is recognized that each case will be unique in terms of the timing of the pregnancy or adoption relative to the academic calendar, and that creative and supportive solutions will be required on the part of advisors, chairs, TA coordinators, etc.

The leave will ordinarily begin at the time of birth or adoption, but other proposals will be considered. Departments – both advisors and chairs – are expected to provide flexibility in working out the details of the leave and to adjust the timeline of the leave as needed to accommodate any unexpected medical issues that arise during pregnancy (e.g., doctor-ordered bed rest).

Additional Policies & Resources

Graduate School Policy: Residence for Tuition Purposes

Employee Disability Resources

Graduate Assistantship Policies and Procedures (GAPP)

Professional Development

When you participate in professional development, you build skills needed to succeed academically and thrive in your career. The following are professional development activities that we recommend for your consideration. Required professional development will be detailed in “Degree Requirements” above.

On Campus

The **Graduate School** develops and curates a wide variety of resources for professional development, including a tool to assess your skills, set goals, and create a plan with recommended activities on campus (e.g., the popular “Individual Development Plan” or IDP) as well as programming to help you explore careers, prepare for a job search, build your network and learn from alumni, manage projects, communicate about your research, and much more.

DiscoverPD helps master’s and doctoral students at UW-Madison advance their academic and professional goals with customized recommendations based on a skills self-assessment. The 400+ professional development recommendations available in the DiscoverPD database are available in a range of formats to best meet your diverse needs, including in-person, virtual, asynchronous, and synchronous opportunities.

The Graduate School communicates professional development opportunities through an e-newsletter, *GradConnections*, that all graduate students receive at their wisc.edu email. Offerings include an extensive array of programs, awards, workshops, and career planning information. The New Educators Orientation (NEO) and Teaching Improvement Program (TIP) offer new and returning TAs training and support for their teaching roles in COE To learn more, visit the UW Graduate Programs & Services website.

The **Center for Leadership and Involvement (CfLI)** is also another campus resource with helpful resources for the professional development of leadership skills. The mission of the CfLI is to cultivate and engage students through practical leadership skill development and involvement experiences. Have a question? Email the office at cfli@studentlife.wisc.edu.

Teaching & Learning Programs collaborates with faculty, instructional staff, and campus administrators to help students develop the skills, attitudes, and knowledge base needed to become efficient, effective users and producers of information. To learn more, visit the UW Libraries website.

In Our College/Program/Department

Delta Program – A research, teaching and learning community for faculty, academic staff, post-docs, and graduate students that supports their success in the changing landscape of science, engineering, and mathematics higher education through courses, workshops, events, and more.

Engineering Career Services (ECS) - Provides resources and guidance for career exploration, resume writing, interview skills, co-ops, internships, and more. ECS also connects employers and students through the campus system Handshake.

UW-Madison Information Technology - Instructional technology, tools, and resources for teaching and learning. Includes learning management systems, in-class and online course development, learning analytics, course evaluation, lecture capture, webinars, and other academic tools for faculty and students.

Writing Center - A community of trained readers and writers that offers resources and support for students, faculty, and staff during all stages of the writing process, for all disciplines and skill levels.

Travel to Meetings and Conferences - An important part of the professional development of a graduate student is participating in professional meetings and conferences. Consult with your advisor about the appropriate venues for you to attend and possible funding sources to cover associated costs. Some advisors may have access to funds to help support travel costs from research grants. Students should also explore volunteer opportunities at conferences to offset registration costs. Students who have been invited to present research at a conference or need additional funds to support research travel in preparation for their dissertation, final exhibition, or thesis should consider applying for a Student Research Grants Competition (SRGC) Award.