Doctor of Philosophy
Civil and Environmental Engineering
Student Handbook

2023-2024

September 2023

Also available online
http://www.cee.northwestern.edu/

Important Dates
Academic Year 2023-2024

Event	Date
CEE Orientation	9/15/2023
Fall Classes Begin	9/19/2023
Last day to add a class for fall	9/25/2023
Last day to drop a class for Fall	10/27/2023
Winter Registration begins	11/13/2023 (tentative)
Fall quarter classes end	12/2/2023
Fall quarter final exams	12/4/2023
Winter classes begin	1/3/2024
Last day to add or change a course	1/9/2024
Martin Luther King Day Observance (no classes)	1/15/2024
Last day to drop a class for Winter	2/09/2023
Spring registration begins	2/19/2024 (tentative)
Winter classes end	3/09/2024
Winter quarter final exams	3/11/2024
Spring break	3/16/2024-3/25/2024
Spring classes begin	3/26/2024
Last Day to add or change a course	4/1/2024
Last day to drop a class for Spring	5/3/2024
Fall 2022 registration begins	5/20/2024 (tentative)
Memorial Day Observance (no classes)	5/27/2024
Spring classes end	6/1/2024
Spring quarter final exam	6/3/2024

Preface

This handbook is intended to provide you with a comprehensive guide to the Doctor of Philosophy (Ph.D.) degree in Civil and Environmental Engineering (CEE) programs, The Graduate School (TGS) at Northwestern University. We hope this handbook will enhance your experience at Northwestern.

This handbook is prepared as a handy reference guide to the degree requirements, programs, policies, and procedures of the Department and The Graduate School. We hope that you will find the information you need for both planning and understanding your Ph.D. education.

The Department would also like to emphasize the importance of social and ethical implications of an engineer's work in the betterment of the society. Through student professional organizations, departmental seminars, and many ethnics groups, you can interact with world renowned researchers and engineers, and experience diverse cultures. You can also interact with professionals in the greater Chicago area through meetings hosted by various professional groups. We hope you will take full advantage of the opportunities presented to you during your stay with us.

We hope you find this handbook a useful resource for your Ph.D. study. We wish you much success and welcome your suggestions for improvement of the handbook.

Kimberly Gray, Ph.D.
Roxelyn and Richard Pepper Family Chair and Professor
in Civil and Environmental Engineering"

Giuseppe Buscarnera, Ph.D.
Professor and Director of Graduate Studies
Civil and Environmental Engineering

Introduction

Welcome to the Department of Civil and Environmental Engineering (CEE), McCormick School of Engineering and Applied Science at Northwestern University. CEE offers the Doctor of Philosophy (PhD) degree in four Program Areas:

1. Environmental Engineering and Science (EES)
2. Geotechnics (GEO)
3. Transportation Systems Analysis and Planning (TRN)
4. Mechanics, Materials, and Structures (MMS)

The faculty, staff, and students at CEE look forward to interacting with you so that you can enjoy the maximum learning, social, and cultural experience Northwestern University can offer you. This handbook is part of our effort to help you achieve this goal. We hope you will thoroughly read this handbook at least once to see the types of information included here. We also hope that you will refer to it whenever you have an academic related question. Of course, our faculty and your peers are available to address any issue you may have. Please feel free to contact them.

A new edition of the handbook is published annually to coincide with each academic year. Revisions will be made as needed each quarter; revision dates are shown on the cover page and the footer of each page. The handbook is also available online on the CEE department website.

To assist us in the continuing effort to improve this document, please send your suggestions and comments to Professor Giuseppe Buscarnera, Director of Graduate Studies and Professor at g-buscarnera@northwestern.edu.

Degree Requirements

The Department of Civil and Environmental Engineering (CEE) offers The Graduate School (TGS) Doctor of Philosophy (PhD) degree in four (4) Program Areas. The requirements for the PhD degree vary depending on the program area, however each program area shares these common requirements:

1. Coursework. TGS requires a minimum of 9 units of coursework to be completed for a letter grade (not 590 research units) if the student joins NU with a MS degree, or 12 units of coursework if the student joins NU with no MS degree. It is CEE policy that all incoming PhD students complete no fewer than 9 course units in the first academic year of study. Transfer credits are not allowed. Individual CEE program areas may require more coursework. Students should check with the program area coordinator for more details. Students completing a MS degree in the same program along the way to earning a PhD may be able to use some of the MS coursework to meet the PhD coursework requirements, depending on the guidelines of the individual program and consent of the advisor.

2. Candidacy. Admission to Candidacy is a milestone where faculty assess whether a student has acquired sufficient knowledge and experience to proceed with PhD research. The initial offer of admission to the PhD program does not guarantee Admission to Candidacy. The process for admission to candidacy is:

   a. PhDs should be considered for Admission to Candidacy following completion of the required coursework (see item 1 above). The Admission to Candidacy process should not extend beyond the 4th academic quarter of study (i.e., December of second year of study) for a student with a previously earned MS degree, or the 6th academic quarter of study (i.e., June of second year of study) for a student who entered with no MS.

   b. PhD students must meet TGS's English Proficiency requirement (international PhD students only).

   c. PhD students must have a research advisor who has agreed to supervise their PhD studies before consideration.

   d. Admission to Candidacy requires passing the Qualifying Exam. The Qualifying/Candidacy Exam is held with a committee of at least three faculty members, one of whom (not the advisor) will be designated as Chair. Depending on the program area, the advisor may not be part of the committee. The Qualifying Exam is not open to the public. The subject matter of the Qualifying Exam will be tailored to the research area, and will involve a research task, written report, oral presentation, and/or oral examination of the student's work. Individual CEE program areas follow specific procedures to organize the logistical and technical details of the Qualifying Exam. Students should discuss these procedures with their program area coordinator and prepare for the exam accordingly.

      i. The grades for the Qualifying Exam are: pass, provisional pass, and fail; occasionally a high pass will be awarded to those students who perform extraordinarily well. A grade of pass means the Qualifying Exam requirement is satisfied. In most cases, students will be notified of the exam outcome at the conclusion of the exam. In case of exams requiring further assessment by the committee, the outcomes will be notified in written form no later than two weeks after the conclusion of the exam.

      ii. Students receiving a provisional pass grade are given conditions and a time interval under which a passing grade may be awarded. The Chair of the examination committee will monitor the completion of the said conditions.

Although the Qualifying Exam requirement will not be satisfied until these conditions are met, a re-take of the Qualifying Exam may not be required, unless specifically requested by the Qualifying Exam committee. Failure to successfully satisfy the conditions of the provisional pass within the assigned timeframe will invalidate the provisional pass and effectively convert it into a grade of fail.

    iii. A student receiving a grade of fail on the Qualifying Exam may retake the exam once; a second failing grade will result in the student not being allowed to continue in the PhD program. It is recommended that the exam be retaken within one quarter of the first attempt.

The Qualifying Exam process is scheduled and managed by the CEE Director of Graduate Studies (currently Giuseppe Buscarnera) and CEE Graduate Student Program Assistant (currently Christina Wagner).

    e. The standard for Admission to Candidacy is a graduate GPA at Northwestern of 3.5.

    f. Following satisfaction of the requirements in (b) through (e) above, the CEE Director Graduate Studies will approve Advancement to Candidacy with TGS.

3. Prospectus. The Prospectus process involves the development of a written research proposal that will culminate in the dissertation. This research proposal should be of the style and quality of a standard NSF proposal. The written proposal is delivered to the committee no less than two weeks before the Prospectus defense date. On the Prospectus defense date, the proposal is presented and defended in oral form to the Prospectus committee. The prospectus presentation is open to the public, but the subsequent examination is with the committee only. The Prospectus milestone should be completed no later than the end of the 3rd year of PhD study (June of 3rd year of study), although students are encouraged to complete this milestone by December of the 3rd year study.

4. Committee. CEE requires a minimum of 3 graduate faculty members, one of which must be from outside of the department. It is typical that the Prospectus committee and Dissertation committee are the same group of faculty, but these committees can change if needed. PhD students are free to have committees larger than three members if they wish.

5. Dissertation. PhD students must complete a written dissertation that is a significant and original research contribution, based on the research project presented in the Prospectus. PhD students defend the dissertation to the Dissertation committee in a presentation open to the public. The details of the individual dissertation and defense are up to the advisor and PhD student, and subject to the requirements available on the TGS website.

Program-Specific Requirements:

Individual programs may have expansions or alterations to the requirements outlined above. To view the current practices in your program, please consult the CEE website:
http://www.mccormick.northwestern.edu/civil-environmental/graduate/index.html

Responsibility for Meeting Degree Requirements

Ultimately, students are responsible for understanding the degree requirements for their specialty area and for planning their courses of study accordingly. CEE, TGS, and the McCormick Assistant Dean of Graduate Study are valuable resources for academic information. Faculty advisors and area coordinators will assist you in course selection and research activities. However, they are not responsible for ensuring that you meet all the degree requirements including grade point average (GPA) requirement - that is the responsibility of the student.

Academic Advising

The Department is using the GSTS (Graduate Students Tracking System) to monitor the academic progress of all graduate students. You will have a 24/7 access to your unofficial academic record (the only official academic record is the transcript issued by the Registrar Office). GSTS is: https://gsts.northwestern.edu/site/login.
You can login with your NETid and password.

While GSTS is a useful tool for academic progress, your advisor is your primary resource for academic and professional advice. As experts in their fields, you should take the opportunity to interact with your advisors as often as possible.

1. Academic Advisor

With some exceptions, each new PhD student is automatically assigned to be advised by the area coordinator of the program area they join:

Environmental Engineering and Science (EES): Jean-François Gaillard
Geotechnics (GEO): Giuseppe Buscarnera
Transportation Systems Analysis and Planning (TRN): Marco Nie
Mechanics, Materials and Structures (MMS): Gianluca Cusatis

This initial assignment is for orientation purposes and to ensure you have a contact to select courses for your first quarter of study. As the fall quarter begins, you should begin the process of identifying a faculty member who will serve as your PhD advisor for the duration of your studies. CEE does not have a formal matching process by which students are assigned to advisors. We allow the process to happen organically, and in order for this to work properly, students must reach out to faculty to identify mutual interest. The program area coordinator can help you to get this process started – speak to this person if you are unsure of how to proceed. Your goal should be to identify a thesis advisor no later than the end of your third quarter of study.

Once you have selected an advisor, please contact the academic program coordinator (Christina Wagner), the director of graduate studies (Giuseppe Buscarnera), and your area coordinator with this information. Please log your advisor selection in GSTS as well.

2. Curriculum Plan

The curriculum plan is highly dependent on the program you are in, the research topic you intend to pursue, and the opinions of you and your advisor. Please consult with your advisor to select appropriate coursework. Once you select a curriculum plan, it may be entered in GSTS. This is due by October 31st.

3. Satisfactory Progress

According to The Graduate School (TGS) requirements, https://www.tgs.northwestern.edu/academic-policies-procedures/policies/satisfactory-academic-progress.html, a GPA of 3.0 is required for graduation. A GPA below 3.0 in any quarter will place a student on probation. Probation is intended as a notice of unsatisfactory academic performance and constitutes a warning that improvement must be made in subsequent work to demonstrate progress toward the PhD degree. TGS allows a student up to two (2) consecutive quarters to return to satisfactory progress (quarter and cumulative GPA $\geq$ 3.0). Lack of improvement or evidence of inability to complete the work successfully in a given curriculum may provide reason for exclusion (dismissal).

Departmental Policies

1. Academic Integrity

CEE holds all members of the department to high standards of Academic Integrity. It is expected that new graduate students become familiar with the policies of academic integrity as outlined by TGS and the Office of the Provost:

https://www.tgs.northwestern.edu/academic-policies-procedures/policies/academic-integrity.html
https://www.northwestern.edu/provost/policies/academic-integrity/principles.html

Please note that per TGS's Academic Integrity policy, we do not handle violations within our department – these matters are forwarded to the Associate Dean of Student Services at TGS, and are handled by the TGS protocol.

2. English Proficiency

The faculty of CEE view proficiency in the English language as one of the primary educational components of PhD study at Northwestern University. As outlined in the Degree Requirements students must pass the TGS English Proficiency requirements before admission to candidacy. English Proficiency is also a requirement to serve as a teaching assistant in the department. The options available for passing the English Proficiency requirement are available on the Assistantships page of the TGS website:

http://www.tgs.northwestern.edu/funding/assistantships/graduate-and-teaching.html

3. Teaching Requirement and Teaching Assistantships (TAs)

All CEE PhD students are required to have a significant teaching experience during their PhD studies; this requirement is typically satisfied by serving as a TA for one or more quarters. PhD students must satisfy TGS's English Proficiency requirement before being appointed as a TA.

TA positions are half-time appointments, with salary paid by departmental funds, for which PhD students are expected to work 20 hours per week and report to the instructor of the course. During the quarter that the PhD student is serving as a TA, the 20 hours of effort is the source of the PhD students funding, and must therefore be the first priority of the student's effort in that quarter. Other activities such as his/her own coursework and research must fit within the schedule required of the TA position. TAs are encouraged to attend the lectures of the courses they TA for, and in the case of TAs being unfamiliar with the course material, lecture attendance is mandatory.

4. Responsible Conduct of Research (RCR)

All CEE PhD students are required to complete RCR training as soon as possible after entering the program, and no later than the end of the third quarter of study. RCR training consists of two parts: (1) online training provided by CITI, and (2) an in-person course offered by McCormick. PhD students must complete BOTH of these courses to be in compliance with RCR. The RCR policy is outlined at the following webpage: https://www.researchintegrity.northwestern.edu/training/responsible-conduct-of-research-rcr-training/

5. Appeals

The CEE faculty and staff make every effort to ensure that each student's progress is carefully reviewed and the resulting feedback is accurate and constructive. Despite these efforts, there may be instances in which a student feels a review decision is unjust or based on incomplete or inaccurate information.

If this occurs, there are appeal channels available to the student. We encourage students with such a conflict to proceed in the following order:
1. Bring the concern to the advisor or other committee member to discuss; there may have been a simple misunderstanding that can be resolved quickly.
2. If the student and faculty are unable to resolve the concern, the student should bring the appeal to the Director of Graduate Studies (DGS) and/or the CEE chairperson.

In the event of an appeal, the DGS will follow the TGS grievance policy as outlined in the TGS Catalog.

6. Computer Policies

It is incumbent on any person who uses University resources, such as computers and associated networks, to ensure that they are not using illegal software. Downloading and using software that was obtained illegally is against University policy. Obtaining software legally means that either you personally, or your advisor through NU, has paid for the correct number of copies of the software for the number of computers you have installed the software on.

It is also against University policy to illegally download copyrighted material, such as movies, videos, mp3's, scientific papers, magazine articles, etc. Any person who has violated this policy is subject to the disciplinary action determined by the university.

There are many alternatives to using illegally obtained software. The University provides a limited number of software titles available for students on the IT website at:
http://www.it.northwestern.edu
located under the "Students" tab. Also, many software titles are available either free, or at a reduced cost, for educational purposes. In addition, there are many free alternatives to standard software titles, such as Open Office, that can be used freely and are very robust.

Any questions or concerns about this matter should be directed to your advisor or the CEE IT at cee-it@mccormick.northwestern.edu.

7. Laboratory Safety Training and Policies

All PhD students must be on the official Office for Research Safety lab roster, and must complete all ORS and CEE required lab safety training and preparation, ***before he or she can begin any lab work***. The required training can be taken on-line. The first step is discussing with the Lab Coordinator (LC) what you intend to do in the lab, and what hazards may be involved. The LC will also explain the lab rules of etiquette and cleanup. Then, the LC or your PI/advisor will add you to the lab roster. Once you are on the roster, you will receive email notification from lumen (https://lumen.northwestern.edu) Lumen, the automated training web site. The email will provide links to take the on-line ORS training. They can be taken from any NU computer, or off campus (requires VPN). The LC will be notified when you have successfully completed the ORS training.

All lab workers must complete the CEE on-line training:
http://www.mccormick.northwestern.edu/civil-environmental/research/lab-safety.html.
Applicants should read the Safety Guide, then take the Safety Quiz. Submit the quiz as an attached file (pdf, doc, txt, etc.) to Dave Ventre at d-ventre@northwestern.edu

Upon successful completion of the Safety Quiz, the LC will give you your lab access code and you can begin lab work. Please note that our labs and workshops contain certain specialty machines and tools that require individual, hands-on training to operate safely. This includes MTS machines, the Hobart mixers, saws, grinders, drills, hand tools, welding equipment and others. Most are kept locked. Using any such machines without proper training and LC approval is strictly forbidden. Anyone working in a lab without the required training, failing to follow lab safety and hygiene rules, or

operating equipment without proper training and authorization, will have their lab access and privileges suspended.

Missions

Northwestern University

Northwestern is committed to excellent teaching, innovative research, and the personal and intellectual growth of its students in a diverse academic community.

The Graduate School

The mission of The Graduate School at Northwestern University is to cultivate an environment of academic excellence where graduate students and postdoctoral fellows are enabled to learn, discover, and create knowledge that enlivens an understanding of human endeavors and the world in which we live.

Department of Civil and Environmental Engineering

We inspire and cultivate innovative leaders and problem solvers prepared to address complex societal-scale challenges in areas of resilient infrastructure, smart and sustainable cities, water and energy security, climate change, mobility of goods and people, and environmental protection. We achieve this mission through:

1. *Education that advances the intellectual development of our students using modern engineering curricula focused on quantitative and predictive methods, academic and professional mentoring, and service-based learning;*
2. *Research that leads to new theories and techniques and transforms our ability to design, construct, and manage society's infrastructure, control material behavior, and sustain natural and engineering systems around the world;*

Cultivation of a diverse community of scholars, who, through motivation to serve society, are prepared to lead, manage, and make decisions both inside and outside the Civil and Environmental Engineering professions..

The above mission statements can be found on the websites:
University – http://www.northwestern.edu/provost/about/index.html
The Graduate School – http://www.tgs.northwestern.edu/about/index.html
CEE Department - http://www.mccormick.northwestern.edu/civil-environmental/about/mission-vision-statement.html

Nondiscrimination Statement

Northwestern University does not discriminate or permit discrimination by any member of its community against any individual on the basis of race, color, religion, national origin, sex, pregnancy, sexual orientation, gender identity, gender expression, parental status, marital status, age, disability, citizenship status, veteran status, genetic information, reproductive health decision making, or any other classification protected by law in matters of admissions, employment, housing, or services or in the educational programs or activities it operates. Harassment, whether verbal, physical, or visual, that is based on any of these characteristics is a form of discrimination. Further prohibited by law is

discrimination against any employee and/or job applicant who chooses to inquire about, discuss, or disclose their own compensation or the compensation of another employee or applicant.

Northwestern University complies with federal and state laws that prohibit discrimination based on the protected categories listed above, including Title IX of the Education Amendments of 1972. Title IX requires educational institutions, such as Northwestern, to prohibit discrimination based on sex (including sexual harassment) in the University's educational programs and activities, including in matters of employment and admissions. In addition, Northwestern provides reasonable accommodations to qualified applicants, students, and employees with disabilities and to individuals who are pregnant.

Any alleged violations of this policy or questions with respect to nondiscrimination or reasonable accommodations should be directed to Northwestern's Office of Equity, 1800 Sherman Avenue, Suite 4-500, Evanston, Illinois 60208, 847-467-6165, equity@northwestern.edu.

Questions specific to sex discrimination (including sexual misconduct and sexual harassment) should be directed to Northwestern's Title IX Coordinator in the Office of Equity, 1800 Sherman Avenue, Suite 4-500, Evanston, Illinois 60208, 847-467-6165, TitleIXCoordinator@northwestern.edu.

A person may also file a complaint with the Department of Education's Office for Civil Rights regarding an alleged violation of Title IX by visiting www2.ed.gov/about/offices/list/ocr/complaintintro.html or calling 800-421-3481. Inquiries about the application of Title IX to Northwestern may be referred to Northwestern's Title IX Coordinator, the United States Department of Education's Assistant Secretary for Civil Rights, or both.

Student and Professional Organizations

Student and professional organizations provide networking opportunity and seminars on the state of the art research and design in the civil and environmental engineering profession. The Department of Civil and Environmental Engineering is home to the Student Chapter of American Society of Civil Engineers (NU ASCE). Professional organizations of all branches of civil and environmental engineering have local section in Chicago area which hosts monthly meetings. You are encouraged to attend some of these meetings to interact and network with the engineering profession.   Following is a list of organizations you may consider participating.

Student organizations at Northwestern:

Civil and Environmental Engineering Graduate Association (CEEGA) – see Charles Martell, staff advisor or Prof. Giuseppe Buscarnera, faculty advisor.

McCormick Graduate Leadership Council (MGLC) Founded in 2006, the MGLC fosters community among all McCormick graduate students. http://mglc.mccormick.northwestern.edu/

Graduate Student Association (NUGSA) at Northwestern enhances graduate students' experiences in and out of the classroom and strives to create resources and programs to improve the quality of students' lives. https://nugsa.wordpress.com/

Graduate Leadership and Advocacy Council (GLAC) is the voice of graduate students in academic and administrative matters at Northwestern University and a forum for graduate student leaders. http://sites.northwestern.edu/glac/

For PhD students in Civil Engineering:

Northwestern University American Society of Civil Engineers Founded in 1852, the American Society of Civil Engineers represents more than 140,000 members of the civil engineering profession worldwide and is America's oldest national engineering society. ASCE's mission is to provide essential value to our members and partners, advance civil engineering, and serve the public good.

The Mission of NUASCE is *to create a more informed and involved Civil Engineering community by providing opportunities to apply and further refine technical skills, increasing student and faculty interactions, and preparing students to enter the professional engineering industry.* Through NUASCE you will have the opportunity to meet other students with similar interests, network with professionals, and participate in exciting design competitions such as concrete canoe and steel bridge.   Most importantly, the student chapter prides itself on creating a strong community of engineers, and they would love for you to join!!!   For more information, visit their website: http://asce.mccormick.northwestern.edu.

Chicago Area Professional Organizations

Illinois Section American Society of Civil Engineers represents Civil Engineers in Northern Illinois. The Section has five technical groups and the Younger Member Group (YMG). The technical groups are Environmental and Water Resources Institute (EWRI), Geo Institute (GEO), Structural Engineering Institute (SEI), Transportation and Development Institute (T&DI), and Urban Planning and Development (UBD). All groups hold monthly lunch or dinner meeting. YMG usually hosts social event for younger engineers of all disciplines to network and they also sponsor a number of outreach events to pre-college students. For more information, visit http://www.isasce.org/.

American Concrete Institute (ACI) https://www.concrete.org/
American Institute of Steel Construction (AISC) http://www.aisc.org/
Institute of Transportation Engineers (ITE) http://www.ite.org/
Structural Engineers Association of Illinois (SEAOI) advances and advocates excellence in structural engineering and to aid in safeguarding the public. https://www.seaoi.org/
Transportation Research Board (TRB) http://www.trb.org/AboutTRB/AboutTRB.aspx

For PhD students in Environmental Engineering and Science:

As research is performed in a variety of fields, i.e., Chemistry, Microbiology, and Transport Processes there are a number of International and national organizations to choose from. The most commons are:

The American Chemical Society that publishes the journal *Environmental Science & Technology*, among many other relevant journals, and that has been a reference journal for all the work performed in Environmental Engineering. Student membership is as it also provides cheaper registration for 2 annual meetings, and also local sections.

The American Society for Microbiology that publishes Applied and Environmental Microbiology, one among many others. As with ACS, ASM organizes annual meetings and also provides students' memberships at low cost.

The American Geophysical Union that sections dealing with Hydrology, Atmospheric Sciences and Biogeosciences. AGU publishes also many relevant journal dealing with earth sciences at large.
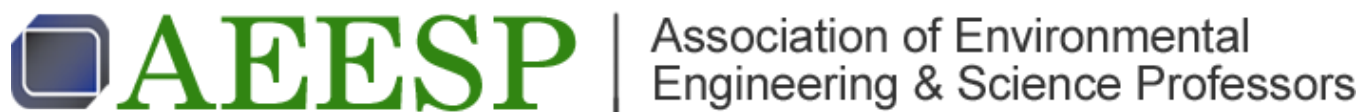
That is the professional organization for academics that provides a student membership open to full-time graduate students and postdoctoral appointees in environmental engineering, environmental science or related fields who intend to pursue careers in academia.

Internship and Career Development

Civil and Environmental Engineering Career Fair

Through the joint effort of NUASCE and EnvEUS, the inaugural **CEE Career Fair** was held in 2013. Since 2014, the Career Fair has been organized by the CEE Department with support from McCormick's Engineering Career Development office beginning in 2019. CEE Career Fair focuses on firms that hire civil and environmental engineering graduates for internships and for full time engineering positions. The number of participating companies has gone from six in 2013 to 24 in 2016. Starting in the 2016-2017 academic year, the Department expanded the Career Fair to have a Fall and Winter Career Fairs. **The Fall Career Fair is held in October while the Winter one is held in January**. Watch for the announcement of the event and call for registration and submission of resumes. The Department also maintains a web page http://www.mccormick.northwestern.edu/civil-environmental/career-opportunities/career-fair.html where internships and graduate engineer positions are posted when the information is sent to the Department. We suggest you check on the site periodically to see what is being posted.

McCormick Office of Career Development (MCD)

MCD http://www.mccormick.northwestern.edu/career-development/index.html provides career preparation and employment assistance through a variety of work-integrated learning programs including co-op engineering education, internships, research experience, and service learning. Register with **McCormickConnect** (http://www.mccormick.northwestern.edu/career-development/mccormickconnect.html) to receive information on job postings, resume submissions, interview schedules, career events, or meet with a MCD advisor. MCD is located in Room 2.350 in Ford Building.

Northwestern Career Advancement (NCA)

The mission of Northwestern Career Advancement is to foster excellence in career development, preparation, and professional opportunities for undergraduate and graduate students and alumni by providing comprehensive services and programming and by promoting strong partnerships with employers, academic departments, and the university community.
http://www.northwestern.edu/careers/

Questions

Students should consult with their academic advisors regarding academic and professional issues such as course selections and career guidance. The Director of Graduate Studies (DGS) will assist the academic coordinator when procedural issues arise.

Staff Contact Information

Department Chair: Prof. Kimberly Gray, k-gray@northwestern.edu

Program Coordinator: Christina Wagner, christina.wagner@northwestern.edu

Director of Graduate Studies: Prof. Giuseppe Buscarnera, g-buscarnera@northwestern.edu

EES Program Coordinator: Prof. Jean-François Gaillard, jf-gaillard@northwestern.edu

STR Program Coordinator: Prof. Gianluca Cusatis, g-cusatis@northwestern.edu

GEO Program Coordinator: Prof. Giuseppe Buscarnera, g-buscarnera@northwestern.edu

TRN Program Coordinator: Prof. Yu (Marco) Nie, y-nie@northwestern.edu

Business Administrator: Mr. Charles Martell, Charles.martell1@northwestern.edu

Financial Assistant: Mounir Affoun, Mounir.affoun@northwestern.edu

Laboratory (dry) coordinator & Lab safety coordinator: Dave Ventre, d-ventre@northwestern.edu

Environmental laboratory & safety coordinator: Chan (Yingqian) Xiong, yingqian.xiong@northwestern.edu

IT Help: help@mccormick.northwestern.edu

Catalog of Helpful Notes and Websites

1. **Academic Questions?** People to contact:
   a. Christina Wagner – Academic Program Coordinator
   b. Area coordinator of your program
   c. Your advisor
2. **CAESAR** – Course registration, transcripts, etc.
   http://www.northwestern.edu/caesar/
3. **CEE Course schedule/ Listings**
   http://www.mccormick.northwestern.edu/civil-environmental/courses/index.html
4. **Academic Calendar**
   http://planitpurple.northwestern.edu/calendar/academic_calendar
5. **WildCard**
   http://www.northwestern.edu/uservices/wildcard/
6. **Parking**
   http://www.northwestern.edu/up/parking/
7. **Campus busses and Shuttles**
   http://www.northwestern.edu/uservices/transportation/shuttles/
8. **Health Service**
   http://www.northwestern.edu/health/
9. **History of NU**
   http://www.northwestern.edu/about/history/
10. **History of McCormick School of Engineering** -
    http://www.mccormick.northwestern.edu/about/history.html
11. **Transportation Center & Library**
    http://www.transportation.northwestern.edu/
    http://www.library.northwestern.edu/libraries-collections/evanston-campus/transportation-library
12. **International Office**
    http://www.northwestern.edu/international/

GSTS Help Guide

Profile

The profile section displays your contact, **demographic**, **financial aid**, and **milestone** information, as well as **administrative notes**. Your student profile section can be viewed by clicking the SHOW PROFILE button, located at the upper right of the Committee, Plan of Study, Academic Progress, and Research Project tabs.

Milestones

Milestone	Deadline	Status	Date Updated	Details	Type
TGS PhD Degree Completion	2020-08-31	Initiated	2011-09-30		TGS
TGS Prospectus	2014-08-25	Completed	2014-08-25		TGS
TGS Qualifying Exam	2014-08-25	Completed	2014-08-25		TGS
CITI/RCR	2012-09-20	Initiated	2014-11-14		
Proposal/Prospectus	2013-06-20	Initiated			
Versant	2011-12-20	Initiated			
TA Requirement	2014-03-20	Initiated	2014-11-19	TA for Mascotology 101	

Milestones information can be displayed by clicking the **MILESTONES** button at the upper right of your profile. TGS milestones (as listed in the Type column) are maintained in CAESAR; Non- TGS milestones are managed by your program.

Committee

The Committee tab is where you identify your principal research advisor and committee members. 1st year PhD students will be advised by their Area Coordinator. Area Coordinators have already been added as your Program Advisor. Once you select your principal research advisor, you will add them on this tab.

Advisor

To add an advisor, start typing the faculty member's name in the **Search faculty** field until you see his or her name. Click the name and then use the dropdown to indicate whether they will be the advisor or a co-advisor, then click the **Add** button.

Committee

To add a committee member, start typing the faculty member's name in the **Search faculty** field until you see his or her name. Click the name and then use the dropdown to indicate their role (if applicable), then click the **Add** button.

To add a committee member who is not a faculty member at Northwestern, use the **Non-Northwestern Committee Member** add faculty tool (see screenshot on previous page). Click the **+** button at the lower left of the tool, then fill in the person's identifying information and click the **Submit** button.

Note: In order to add a committee members, **the "I have formed a committee" slider must be moved to Yes** (otherwise the add faculty tools will not be visible).

Invitations

Invitations can be sent to faculty members for them to accept or decline membership on a committee.

Note: Invitations are an optional feature that can be turned on or off. If you don't see the invitations tab, your program may not have this feature turned on.

To send invitations, click the **Send Committee Invitations** tab. Check the boxes next to the faculty members you wish to invite, then click **Send Email.**

Note: The text of the invitation can be modified, but **it is important not to change any text that appears between the "{ }" brackets**, as this is where GSTS data such as names and hyperlinks will be merged into the message

The invited faculty member(s) will receive an email instructing them to click the accept link or the decline link—no login will be required on their part:
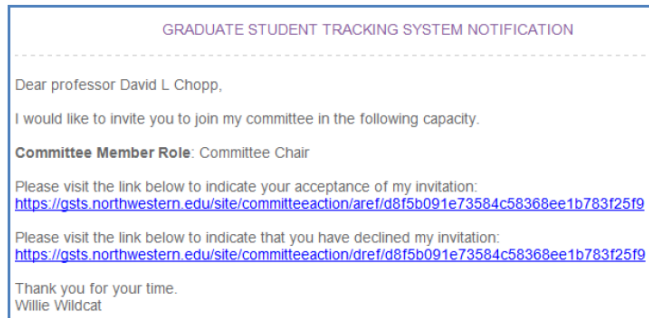
Once a faculty member accepts or declines, their decision will display in the Committee tab:

Plan of Study

The Plan of Study tab displays your completed and planned courses, which can be categorized under the program's course requirements.

Planned Courses

To add a course that you plan to take in the future, start typing the course name or catalog number in the **Search Courses** field under the appropriate course requirement section, select the course when it appears, choose a planned term from the dropdown, then click **Add.**
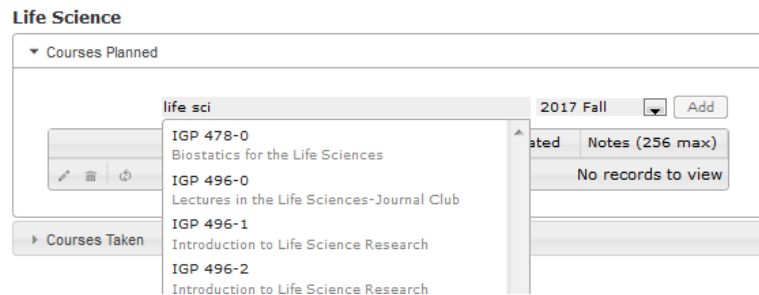
Note: In order to add a planned course, the "Completed and ready for review" slider must be moved to **Not Yet** (otherwise the Search Courses tool will not be visible).

Academic Progress

You can track and maintain your academic activities throughout the year on the Academic Progress tab to facilitate the program's annual review of your progress.

Progress Items

There are 12 sections where you can record various progress items:

- **Self-Evaluation** – you can use the Self-Evaluation dropdown to rate your progress on a 4-point scale.

- **Narrative Statement on Progress** – allows a space for you to provide a narrative overview of your academic progress thus far.

- **Research Topic** – provides space for you to type a brief overview of your research topic.

- **Awards** – a place to list any external awards.
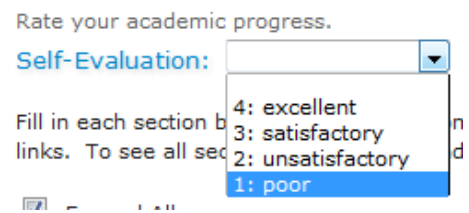
- **Publications** – a place to list books, journals, and other publications you've authored.

- **Honors** – a place for you to list honors, accolades, and citations.

- **Meetings Attended/Presentations** – a place to list conferences attended and presentations given.

- **Teaching** – a place to record NU classes you've taught or were otherwise involved with. Start typing a course name or number the **Search Courses** box to find NU courses.

- **Other Courses of Seminars Attended**

– A place to list any courses, seminars, trainings, or other items attended that are not included elsewhere in the Academic Progress tab.

- **Goals for Academic/Research Progress for Upcoming Year** – a space for you to provide a narrative describing your academic and research goals for the upcoming year.

- **Annual Meeting** – a place for you to record the date of your annual meeting and list the committee members who were present.

- **Comments** – a free-text field for you to add any coments or progress items that were not included in the other categories.
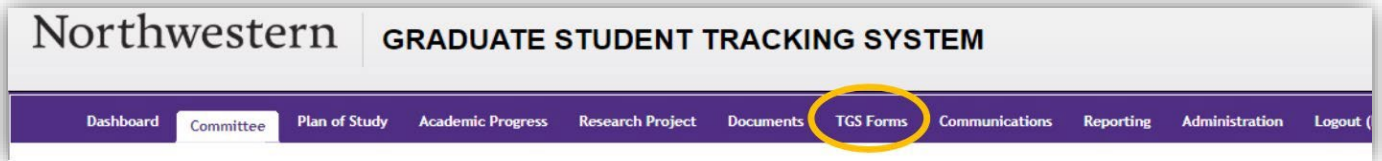
Research Project

The Research Project tab is designed for programs that require a research project. However, any program may use this tab in a way that suits their needs, or **it can be ignored if inapplicable.**
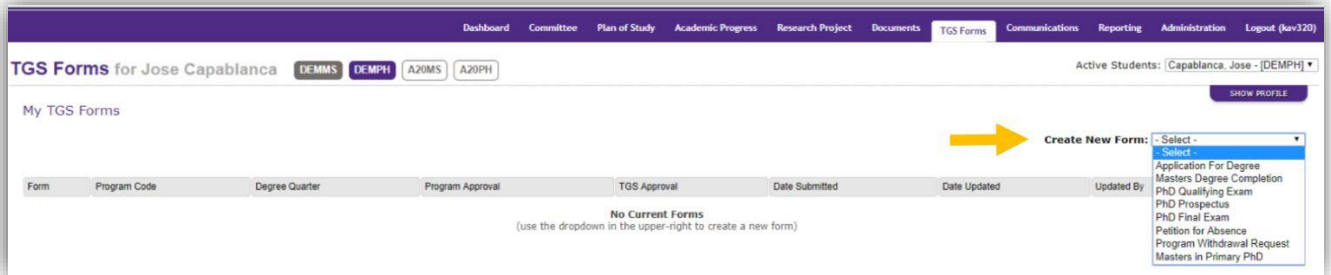
Student fields

The students only have two simple texts fields available on this tab: **Research Project**, for entering a description of the project, and **Comments** for the inclusion of any additional comments.

Quick Guide to TGS Forms in GSTS

Access GSTS at https://gsts.northwestern.edu/site/login and navigate to the "TGS Forms" tab:

Northwestern | **GRADUATE STUDENT TRACKING SYSTEM**

Dashboard | Committee | Plan of Study | Academic Progress | Research Project | Documents | TGS Forms | Communications | Reporting | Administration | Logout (

To **submit a new form**, select the type of form you want to submit from the "Create New Form" drop down menu:

TGS Forms for Jose Capablanca [DEMMS] [DEMPH] [A20MS] [A20PH]

Active Students: Capablanca, Jose - [DEMPH] ▾

My TGS Forms

Create New Form: - Select - ▾
- Select -
Application For Degree
Masters Degree Completion
PhD Qualifying Exam
PhD Prospectus
PhD Final Exam
Petition for Absence
Program Withdrawal Request
Masters in Primary PhD

Form	Program Code	Degree Quarter	Program Approval	TGS Approval	Date Submitted	Date Updated	Updated By

No Current Forms
(use the dropdown in the upper-right to create a new form)

TGS forms and their uses:

Form Name	Audience	Use
Application for Degree	Master's and PhD students	Use this form to petition to graduate for a specified quarter, indicate the name as it should appear on the diploma, and the address where the diploma should be mailed. The diploma mailing address can be updated even after the form is submitted and approved.
Master's Degree Completion	Master's students	Use this form to indicate that you are completing master's degree requirements, your faculty committee members, your advisor and whether or not you completed a master's thesis (and if so, the title).
PhD Qualifying Exam	PhD students	Submit this form once your qualifying exam is scheduled
PhD Prospectus	PhD students	Submit this form once your prospectus is scheduled
PhD Final Exam	PhD students	Submit this form once your dissertation defense is scheduled
Petition for Absence	Master's and PhD students	Submit this form to request a general or family leave of absence, or a parental accommodation.
Program Withdrawal Request	Master's and PhD students	Submit this form to request to withdraw from your graduate program.
Masters in Primary PhD	PhD students	Submit this form to request a master's degree along the way to the PhD in the same program.

Fill out the required information per the form instructions and click the "Submit for Approval" button:
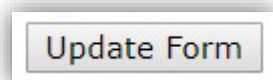
Submit For Approval
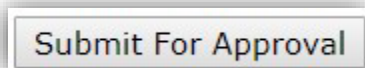
After you submit the form it will be routed to your program, then The Graduate School for review.

To make changes to a form you have already submitted, click on the form you want to update on the "My TGS Forms" list:


Make the necessary changes to the form, then click the "Update Form" button:

Note: For most forms, this can only be done **before** your program has reviewed the form. You may update your diploma name and diploma mailing address on the Application for Degree form **after** it has been approved and through the "Editing Deadline" listed on the form (typically the day of degree conferral).

To withdraw a form you submitted in error, click the "Withdraw Form" button located on the top right corner of the form:
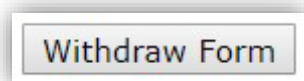
Note: For most forms, this can only be done before your program has reviewed the form.

Withdrawing the form will move it to "withdrawn" status. You'll need to create a new form from the drop-down menu when you are ready to submit the form again.

Contact gsts@northwestern.edu with questions