



The University of Vermont

Graduate Student Handbook

Civil and Environmental Engineering

University of Vermont
Burlington, Vermont

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TABLE OF CONTENTS

1. INTRODUCTION	3
2. GRADUATE PROGRAMS	3
2.1. Acceptance into the Program.....	4
2.2. Basic Requirements for Admission.....	4
2.3. Maintenance of Good Standing.....	5
2.4. Full-time Status	5
2.5. Faculty Advisor and Committees.....	5
2.6. Proposal Requirements	6
3. PROGRAM REQUIREMENTS	6
3.1. Master's Degree Requirements.....	6
3.1.1. Time Limits and Residency.....	8
3.1.2. Thesis Research.....	8
3.1.3. Thesis Defense	8
3.2. Accelerated Master's (AMP).....	9
3.3. Doctoral Degree Requirements.....	10
3.3.1. Significant Teaching Experience.....	10
3.3.2. Comprehensive Examination	10
3.3.3. Dissertation.....	12
3.3.4. Dissertation Defense.....	12
1.1.1. Time Limits and Residency.....	12
2. GRADUATE ACTIVITIES	13
2.1. Graduate Seminars.....	13
2.2. Participation in National Scientific Meetings	13
2.3. UVM Research Conference	13
3. FELLOWSHIPS AND FINANCIAL AID	14
3.1. Graduate Teaching Assistantships (GTA).....	14
3.2. Graduate Research Assistantships (GRA)	14
3.3. Fellowship Grants.....	14
4. HEALTH INSURANCE.....	14
5. SPECIAL COURSE INFORMATION	14
APPENDIX 1 - CEE Accelerated Masters Program Student Timeline	16
APPENDIX 2 – Comprehensive Exam Form.....	18

1. INTRODUCTION

The purpose of this handbook is to provide information to current and potential graduate students about the Graduate Programs in Civil and Environmental Engineering (CEE) at the University of Vermont (UVM). These Programs are under the auspices of the Graduate College, which is responsible for all advanced degrees at the University of Vermont and sets forth the minimum requirements and standards. These requirements are available on their website (<http://www.uvm.edu/~gradcoll/>), which provides excellent information about the Graduate College policies, procedures, deadlines, and courses and should be consulted by graduate students. This handbook provides additional details that are specific to the Civil and Environmental Engineering Graduate Programs. All graduate students are expected to become familiar with this handbook and other graduate college information within the first months of attending UVM.

It is ultimately the responsibility of the student to ensure that all requirements are met, not the advisor's.

Applicants or current graduate students should direct their inquiries to the Graduate Program Director for Civil and Environmental Engineering. The following are useful links for all graduate students in our program:

- 1) Graduate college website - <https://www.uvm.edu/graduate>
- 2) Office of International Education for international students - <https://www.uvm.edu/oie>
- 3) CEE department website - <https://www.uvm.edu/cems/cee>
- 4) Graduate College resources and forms - <https://www.uvm.edu/graduate/resources>
- 5) Graduate Student Senate (GSS) - <https://www.uvm.edu/gss>
- 6) Housing - <https://www.uvm.edu/reslife>
- 7) UVM Student Research Conference - <https://www.uvm.edu/four/uvm-student-research-conference>

2. GRADUATE PROGRAMS

Graduate Programs in Civil and Environmental Engineering (CEE) that lead to the Master of Science (MS) and Doctor of Philosophy (PhD) degrees are offered. The curricular and research programs emphasize engineering related to environmental and water resources; sustainable transportation systems; geotechnical engineering, mechanics of materials and structural engineering.

Research in the department addresses critical issues facing the world related to sustainability and energy; infrastructure systems; climate change, hazard mitigation and adaptation; and environmental and public health. A wide range of research methods are employed including state-of-the-art laboratory and field testing, environmental and infrastructure sensing, computational modeling, and artificial intelligence to name a few.

Recent research topics include water and wastewater treatment, contaminant transport processes and modeling, groundwater remediation, environmental restoration and ecological engineering, hydrological processes, air pollution related health effects, resource recovery from waste, sustainable materials, soil and structural dynamics, structural health monitoring, system reliability, resiliency, geo-energy, and sustainable transportation systems.

2.1. Acceptance into the Program

Applications to our programs must be received by the Graduate College by February 1st for the upcoming Fall semester, and by October 1st for the Spring semester. In some cases, applications can be submitted after these deadlines in consultation with the Graduate Program Director. The applications are reviewed in terms of grade point average, graduate record examination (GRE) scores (if submitted), letters of recommendation, statement of interest, and TOEFL (or IELTS) scores (for international students whose native language is not English). GRE is waived for all applicants, but it can be voluntarily submitted. Graduate teaching assistantships, research assistantships and other scholarships/fellowships are awarded based on applicant qualifications and the need for the applicant's skills within the Programs.

2.2. Basic Requirements for Admission

All applicants must have, as a minimum, a 4-year undergraduate degree from a recognized University. A Bachelor of Science degree in engineering is preferred, but applicants with a B.S. degree in one of the sciences are often accepted. The latter, however, must have a minimum of the following course work: calculus through differential equations (UVM MATH 3201 or equivalent), calculus-based physics (UVM PHYS 1500 or equivalent), and chemistry (UVM CHEM 1400 or equivalent). Some of these courses may be in progress preceding the desired admission date but this should be indicated in the application package. Additional/Remedial course work (up to 9 credits) at the undergraduate level is required for those who lack a sufficiently strong civil or environmental engineering background. Remedial course work typically does not count as credit for the graduate degree.

A basic requirement for admission is a grade point average of at least 3.0. For applicants who fall short of a GPA of 3.0, we encourage them to obtain work experience and/or enroll in graduate level courses through continuing education. Three letters of recommendation are thoroughly reviewed by the faculty for indications of the applicant's potential for success in our graduate programs. The applicant's own statement of interest is very important for determining their fit into the programs. It is therefore important that the applicant understands the research and educational opportunities available within our Programs to determine if that is where their interests lie. International students must have Test of English as a Foreign Language (TOEFL) scores of at least 90 (computer-based) for admission, and 100 to be considered for teaching assistantships. An alternative test such as the IELTS may be considered under prior approval from the Graduate College.

2.3. Maintenance of Good Standing

In addition to the requirements set forth by the University and Graduate College, students must maintain a cumulative GPA of 3.0 to remain in our graduate programs. In addition, students with graduate assistantships must fulfill their duties associated with their assistantships. They must also show adequate progress toward fulfilling their graduate degree requirements and regularly attend the graduate seminars. Students that have been accepted contingent upon completion of certain undergraduate course work must fulfill those requirements within the first two semesters of the program (scheduling permitting).

A written proposal and oral proposal defense presented to the appropriate graduate committee members should be successfully completed by the end of the first calendar year for M.S. students (thesis-option) and the end of the third calendar year for Ph.D. students, but not less than 6 months prior to the dissertation defense. No proposal defense is required for the project-based MS.

2.4. Full-time Status

A minimum of six credit hours is required during the academic year to maintain full-time graduate status. For international students nine credit hours are required to maintain full-time status. The only students who are required to enroll in the summer are international students who are enrolled in their first or last semester at UVM. If it is their first semester they need to be enrolled full-time (9 credits), and if it is their last semester they need to be enrolled at least half-time (5 credits). Domestic students and returning international students do not have a summer enrollment requirement, and signing up for classes is optional. Students that have completed their course requirements, but have not completed all graduation requirements, may enroll each semester for Continuous Registration (GRAD 901-903). Most full-time graduate students take 6-10 credits per semester.

2.5. Faculty Advisor and Committees

A faculty advisor is selected prior to enrollment or during the first semester in the program. Beyond the first semester, financial and time commitments by the advisor justify that any change of advisor be approved by the Graduate Program Director.

By the end of the first year for M.S. students, the advisor (with the student's input) will recommend to the Graduate Program Director a Studies Committee to the Graduate Program Director. The committee membership is specified in Table 1 based on the type of MS degree. The committee's responsibility is to provide advice regarding the student's program of study and research activities. This committee will also participate in the review of the proposal and thesis.

During the second year for Ph.D. students, the advisor (with the student's input) will recommend two committees to the Graduate Program Director: a Comprehensive Examination Committee, and a Studies Committee. The Comprehensive Examination Committee will consist of at least five faculty members who are responsible for the student's comprehensive examination. The committee will consist of the advisor, at least three faculty from the CEE graduate faculty and at least one non-CEE graduate faculty

which will serve as the Chair of the committee. (See Table 1). The purpose of the PhD Studies Committee is to supervise and guide the students through their research and will consist of at least four graduate faculty members two of which must be CEE graduate faculty (See Table 1).

TABLE 1. Faculty membership requirements for CEE Graduate Committees.

Degree Type	Minimum # of Fac.	Min. # CEE Fac.	Min. # non-CEE Fac.
AMP Studies (Project)	2	2	0
AMP Studies (Thesis)	2	2	0
MS Studies (Project)	3	2	1
MS Studies (Thesis)	3	2	1
PhD Studies	4	2	1
PhD Comp. Exam	5	3	1

2.6. Proposal Requirements

Graduate students pursuing thesis degrees are required to prepare and present a written research proposal to their Studies Committees. The proposal will be presented by the end of the first calendar year for full-time M.S. students, and the end of the second calendar year for full-time Ph.D. students unless a time extension is approved by their Studies Committee and the Graduate Program Director.

All committee members are expected attend the oral presentation of the proposal, if all members are not present (or attending virtually) the decision will be made by the faculty in attendance (if there is quorum). The format for this oral presentation is left to the discretion of the student with prior approval by the advisor. If the committee does not feel that the proposal is adequate, they may allow the student an additional two-month time period to make appropriate modifications. Successful completion of this requirement should be reported to the Graduate Program Director.

3. PROGRAM REQUIREMENTS

3.1. Master's Degree Requirements

Students accepted into the M.S. program select either a thesis or non-thesis option within the first semester of enrollment. Funded students are required to pursue the thesis option. The overall requirements for each option are presented in Table 2. Table 3 shows the minimum course requirements for the completion of the M.S. degree in Civil Engineering and Environmental Engineering.

TABLE 2. Comparison of requirements for the thesis and non-thesis options

Requirement	Thesis Option¹	Project Option (Non-thesis)	Course-Only Option (Non-thesis)
Total Minimum Credits	30	30	30
MS Thesis Research Credits	6-9 (CEE-6391)	0	0
MS Project Credits	0	3-6 (CEE-6392)	0
Comprehensive Exam	Oral	Oral	Written
Research Document	Thesis	Research Report	NA

¹Eligible for funding (GRA, GTA, scholarship/fellowship)

TABLE 3. Minimum Course Requirements for MS degree

Requirement	Credit hours
Total minimum number of credits	30
Minimum number of course credits in graduate-level Statistics, Adv. Math. and(or) Numerical Methods	6
Minimum number of course credits in CEE related courses	9
Minimum engineering coursework outside of CEE	3
Graduate seminar participation each semester (mandatory)	0

The coursework should be planned to enhance the student's interests, professional needs and research experience if relevant. A maximum of one course at the 3000- or 4000-level is allowed subject to the approval of the Studies Committee and the Graduate College *before taking the course*. Under no circumstances will courses below the 3000- or 4000-level be allowed for graduate credit. Additional course work at the undergraduate level required by students to make up deficiencies at the undergraduate level may not be allowed as graduate credit.

A comprehensive examination is required of all M.S. students. For thesis-option students, this generally takes the form of an informal oral examination with the Studies Committee at the thesis proposal stage and must be completed 3 months before the thesis defense (typically during the proposal defense).

For the non-thesis Course-Only option students, the required format is a written examination consisting of four topics related to the student's course of study. The advisor solicits written questions from instructors from the courses the student has taken. This is usually taken in the last semester of their program. The comprehensive examination is graded satisfactory (S) or unsatisfactory (U) by the Studies Committee. If unsatisfactory, the student can retake the examination with the advisor's permission.

For non-thesis Project-Option students, the comprehensive exam will consist of a presentation of their project to the Studies Committee comprising a minimum of two CEE departmental faculty (members of the Graduate College) including the project advisor, which is followed by an oral examination. This is usually taken in the last semester of their

program and delivered at the same time as their Research Report. The comprehensive examination is graded satisfactory (S) or unsatisfactory (U) by the Studies Committee. If unsatisfactory, the student can retake the examination with the advisor's permission.

3.1.1. Time Limits and Residency

The maximum time for completion of the M.S. degree is three years for full-time students and five years for part-time students. Leave of absences, withdrawal from the program and continuous registration are all defined by the Graduate College and are strictly adhered to by our Programs.

Master's degree students must satisfactorily complete 21 credit hours in residence, 15 of which must be graded credits. This requirement is met by taking courses for graduate credit at UVM, as long as those credits are taken after a student has been admitted by the Graduate College to the program in Civil and Environmental Engineering.

3.1.2. Thesis Research

Thesis research work generally takes one to one and a half years to complete (generally working part time during the academic year and full time during the summer), and an additional three to six months for documenting the results in a thesis document. Students should sign up for CEE 6391 Master's Thesis Research for research credit.

Students are required by the Graduate College to use the thesis format in terms of margins, fonts, and other details. The guidelines are laid out in “Guidelines for Writing a Thesis or Dissertation” and are available from the Graduate College. Students should also review the Thesis/Dissertation Format-Defense Checklist.

The Graduate College presents a yearly calendar outlining deadlines for thesis defenses, for submission of the thesis and also provides the appropriate forms required to graduate by a certain time. This updated calendar can be found on the Graduate College website.

3.1.3. Thesis Defense

Students must submit a notice to the Graduate College, informing them of the date and title of the thesis, one month prior to the defense date. A format check with the Graduate College staff should be scheduled a minimum of three weeks prior to the defense. The Studies Committee will act as the thesis defense examination committee. The chair of the committee will be the graduate faculty member who is outside the student's Program. The members of the Studies Committee must receive a copy of the thesis at least two weeks prior to the defense date.

The format for the defense is as follows:

- Student gives a formal seminar on their thesis research. This should take between 40-45 minutes. Graduate students, other faculty, friends and interested people may

- attend. The talk should include an introduction, goals and objectives, methods, results and discussion, and conclusions.
- After the presentation, the general audience may ask questions of the speaker.
 - The general audience leaves and the committee remains. Any member of the graduate faculty may remain also. The committee may then ask additional questions related to the research or related underlying principles. This usually takes about an hour, sometimes longer.
 - The student is then asked to leave the room and the committee discusses the thesis and its defense. The committee may require changes/edits, or additions, usually to the discussion and analysis sections. When this discussion end, the student comes back into the room. If the changes are relatively minor, the student passes with the requirement of making the necessary changes and having those checked by the advisor. If major changes or additional work is required, then the student would be allowed additional time to complete the work and re-defend providing they are still within the required time-limit (2 months before the intended graduation date).
 - The committee chair ensures that the necessary forms be submitted to the Graduate College.

The acceptability of the thesis is determined by the thesis defense committee. A grade of S or U is awarded. The student is allowed one re-examination if the examination performance was not satisfactory. After the defense, there may be numerous revisions required and the student should be aware of this possibility. After corrections have been made and the signature page has been signed the student must submit the original and two copies of the corrected thesis to the Graduate College within the specified time.

It is ultimately the responsibility of the student to ensure that all requirements are met, not the advisor's.

3.2. Accelerated Master's (AMP)

The Accelerated Master's Degree in Civil and Environmental Engineering allows for early admission to graduate studies with the benefit of allowing up to six (6) concurrent credit hours (preapproved) to be double-counted towards the Bachelor's and Master's degree. An additional three (3) credit hours of graduate coursework (preapproved) taken during the undergraduate degree can be applied to the AMP if those credits were not used for the B.S. degree. By enrolling in this Program it is possible to obtain a Master's degree with one additional year particularly with the non-thesis options (Course-Only and Project). Interested undergraduate students should contact the Graduate Program Coordinator. Interested students must apply for admission in the Spring of their junior year and not later than August prior to their senior year. Applications in the fall semester of senior year can be made, but that often restricts the choice of courses that could be double-counted. The details on how to apply and the required information can be found at https://www.uvm.edu/cems/accelerated_masters_programs. See APPENDIX 1 for a timeline of milestones for this degree.

3.3. Doctoral Degree Requirements

Students admitted to the Doctoral program (Ph.D.) in Civil Engineering and Environmental Engineering must satisfy the credit requirements outlined in Table 4.

TABLE 4. PhD credit requirements

Requirement	Credit hours
Total minimum number of credits	75
Minimum number of research credits	35
<i>Maximum</i> number of research credits	45
Minimum number of course credits	30
Minimum number of course credits in CEE courses (taken at UVM, transferred or a combination)	15
Minimum number of course credits graded at UVM	15
<i>Maximum</i> number of course credits transferred from same or another institution	24
Minimum engineering coursework outside of CEE	6
Minimum number of 6000-level courses	9
Graduate seminar participation each semester (mandatory)	0

Under special circumstances Doctoral students may request to apply one 3000- or 4000-level, three-credit courses to their program given prior approval by their Studies Committee. The student's advisor must petition the Graduate College for approval prior to enrollment in the course. Under no circumstances will a course numbered below 3000 be applicable to a doctoral program.

3.3.1. Significant Teaching Experience

All doctoral students must have a semester-long significant teaching experience. This experience goes beyond grading, running help sessions or setting up and helping in the laboratory. A significant teaching experience is one in which the student develops course materials (including several of the following; lectures, example problems, lab exercises, homework problems, quiz questions and examination questions), often presents some of these materials to the students, and works with the students. Examples range from developing and presenting new modules or significantly revising existing modules within an existing course, running the laboratory section of a course, or developing portions of a new course. Doctoral students interested in pursuing a career in teaching in higher education are encouraged to complete the Graduate Teaching Program offered by the Center for Teaching & Learning and the Graduate College (<https://www.uvm.edu/ctl/programs-services/graduate-teaching-program/>).

3.3.2. Comprehensive Examination

A comprehensive examination is required of all Ph.D. students and should be completed by the end of their second year in the doctoral program when they have taken at least 24 credits of graduate course work in different topical areas. Some or all of the 24 credits required may be transferred in from their Master's degree if desired (see Table 4). The

comprehensive examination, successful proposal presentation, and one year of residency at UVM are needed for advancement to candidacy.

The Comprehensive Exam committee is formed at the request of the student and in consultation with their academic advisor. The comprehensive examination covers five topics or courses that are relevant and(or) form an essential part of the fundamental knowledge the student will need in developing his/her research plan. The exam should also cover a diversity of courses and not be restricted to narrow sub-discipline. Each member of the Comprehensive Exam Committee will be responsible for one (and at most two) of the five topics. Students generally select from courses that they have had at UVM, but occasionally a student may select a faculty member that they did not have, but is an expert on a topic that is essential to the student's research. The student and their advisor select the Comprehensive Examination Committee. All members of the Comprehensive Examination Committee must be members of the Graduate College Faculty.

The examination takes place in two days and covers a written part (day 1) and an oral part (day 2). The student is responsible for coordinating the dates for the written and oral examination with their committee members. Students will coordinate with the office of the Dean or Program Administrative Assistant to find a suitable room for the oral examination.

The student provides the Graduate Program Coordinator a list of members with e-mail addresses and phone numbers, and the dates of the examinations (typically at the end of the Spring semester). The Graduate Program Coordinator solicits the questions from the examiners and administers the written exam to the student. Each committee member makes up written questions for the student that will take about an hour. The written examination has a total duration of 6 hours. The student usually answers questions on three topics in the three and a half hour morning session and then the two remaining topics in the two and a half hour afternoon session. The questions can be closed book or open book (determined by each committee member). The Graduate Program Coordinator then returns the examination to the appropriate committee members to be graded (satisfactory (S) or Unsatisfactory (U)). The student should discuss the format and scope with each committee member prior to the examination.

The Oral portion of the exam takes place during an approximate two and a half hour period. During this time each member of the committee is allotted approximately 30 minutes to question the candidate. At the conclusion of the oral exam, the committee convenes and votes (majority wins) on the overall performance of the candidate, namely, satisfactory (S) or unsatisfactory (U).

Success in the Comprehensive Examination is prerequisite for an oral proposal and dissertation defense examination. The comprehensive examination is graded Satisfactory or Unsatisfactory or Unsatisfactory with Committee's recommendation to re-examine. The committee is under no obligation to allow a second (and final) sitting.

3.3.3. Dissertation

The dissertation work generally takes three to six years to complete and depends primarily on the student's background, experience and complexity of the topic. Students with an M.S. and previous research experience generally finish within four years. Students without an M.S. degree and research experience generally take five or more years to finish.

Students are required by the Graduate College to use a certain format for the Dissertation in terms of margins, fonts, and other details. The thesis must be prepared and submitted electronically as described in the Graduate College Electronic Thesis and Dissertation Guidelines. The Graduate College presents a yearly calendar outlining deadlines for defenses, and the submission of the dissertation and the appropriate forms in order to graduate by a certain time. This updated calendar and instructions for writing and submitting the thesis can be found on the Graduate College website (https://www.uvm.edu/sites/default/files/Electronic_Thesis_and_Dissertation_Guidelines.pdf).

3.3.4. Dissertation Defense

Students must have completed their comprehensive examination and submitted their dissertation to the Graduate College for a format/record check before defending their thesis. They must also submit a notice to the Graduate College informing them of the date and title of the dissertation, and members of their Studies Committee one month prior to the defense date. The Studies Committee will act as the dissertation defense examination committee. All members must be Graduate College faculty members. The chair of the Studies Committee will be a graduate faculty member who is outside the CEE Program. The members of the Studies Committee must receive a copy of the thesis at least two weeks prior to the defense date. The format for the defense is the same as that discussed in the Thesis Defense section of the M.S. Requirements.

The acceptability of the dissertation is determined by the Studies Committee. A grade of S or U is awarded. The student is allowed one re-examination if the examination performance was not satisfactory. After the defense, there may be numerous revisions required and the student should be aware of this possibility. After corrections have been made, the electronic version of the thesis must be provided to the Graduate College within the specified time (2 months before the intended date of graduation).

1.1.1. Time Limits and Residency

The maximum time for completion of the PhD is nine years for all students. Leave of absences, withdrawal from the program and continuous registration are all outlined by the Graduate College and are strictly adhered to within these Programs. Doctoral students must satisfactorily complete 51-credit hours in residence, of which at least 15 must be course credits. This requirement is met by taking courses for graduate credit at UVM, as long as

those credits are taken after a student has been admitted by the Graduate College to the program in Civil and Environmental Engineering.

2. GRADUATE ACTIVITIES

2.1. Graduate Seminars

Faculty and graduate students within the Programs organize a weekly seminar series that operates both Fall and Spring semesters. All graduate students must sign up for CEE 6930 CEE Graduate Seminar. All full-time students must regularly attend. Under unusual circumstances normally encountered near the date of graduation, a student may be excused from this requirement. See the Graduate Program Director should you wish to be considered for this option. The seminar series includes a mixture of invited speakers (from academia and industry), faculty speakers (from the Programs and elsewhere at UVM) and graduate student speakers.

Seminar presentations are extremely beneficial for the students in that they get input from other faculty and students during their research phase. Another benefit of the seminar series is that it exposes the students and faculty to cutting edge research and innovative engineering applications by bringing in invited speakers from around the country. Another important reason for a weekly graduate seminar series is that it provides an opportunity for faculty and graduate students to get together. This enhances the sense of community within the Programs. The graduate students alternate bringing in food and making coffee and the atmosphere preceding the formal talk is very friendly and collegial.

2.2. Participation in National Scientific Meetings

All Master's thesis students and Doctoral students should attend and present at minimum a paper at one of the national or regional scientific meetings during their tenure within their respective discipline. Generally, travel support funds are available through the advisor's research grants, CEE Program funds, or Graduate College travel grants. Applications for the mini grant are called for each Fall and Spring by the Graduate College.

All students are expected to participate in some of the various Program and University activities that occur. These include outreach activities to K-12 students, graduate student research conferences, organizing the seminar series, faculty search committee members, conference organizing, university-wide committees on graduate education, meeting with Program visitors, and other activities. These are important for the student's professional development as well as enhancing the Program as a whole.

2.3. UVM Research Conference

Every year the university holds a student research conference to showcase the research activities being carried out by UVM students. All graduate students are strongly encouraged to participate and present their work. The Conference is typically held in the

Spring semester and it involves presentation of a research poster, and in some cases an oral presentation.

3. FELLOWSHIPS AND FINANCIAL AID

Generally, the department strives to fund full-time graduate students pursuing research that do not have their own funding. Assistantships are initially awarded on a competitive basis based on the student's application and experience, and on personal communications with faculty. Generally, upon maintenance of good standing (GPA 3.0) within the program, the student will continue to receive funding during their time as a graduate student.

3.1. Graduate Teaching Assistantships (GTA)

Teaching Assistantships are 4.5 or 9 month appointments and provide a stipend and nine free credits per semester (for a 100% appointment) to a maximum of 75 total credits. A GTA is expected to assist course instructors for a maximum of 20 hours per week of the appointment. Duties often include setting up and assisting in laboratories, grading, running help sessions, and tutoring students. Generally, students do not receive GTA support for more than four semesters.

3.2. Graduate Research Assistantships (GRA)

Research Assistantships are supported by faculty research grants. A stipend and nine free credits per semester are provided (5 credits in summer for students on 12 month stipends) to a maximum of 75 total credits. Students assist the faculty members in their research, which is usually, although not necessarily, part of the student's research.

3.3. Fellowship Grants

Students are encouraged to compete for national graduate fellowships, such as those made available by the National Science Foundation (NSF) for US Citizens or private foundations. Students should talk to their advisor about possible fellowship opportunities.

4. HEALTH INSURANCE

Full time graduate students, i.e. taking nine or more credits, are required to either enroll in the UVM Student Health Insurance Plan (SHIP) or demonstrate through an online insurance form that they have other insurance coverage. If they are registered for credits amounting to half-time or more i.e. they have signed up for five credits or for GRAD 9020, they are eligible to enroll. Note that the enrollment period for fellowships and financial aid opens August 1 and closes September 15.

5. SPECIAL COURSE INFORMATION

In addition to the regular courses the students may enroll, there are several extraordinary courses for which you may need to register. Research credits at the Master's level are obtained by enrolling in CEE 6391 Master's Thesis Research or CEE 6392 Master's Project Research (for non-thesis students), and Doctoral level thesis candidates enroll in CEE 7491 Doctoral Dissertation Research. In addition, once all required credits are completed, students may enroll in Continuous Registration GRAD 9010, 9020 or 9030 to maintain your required 5 credit enrolment demanded by tax law. Satisfactory performance in these courses requires both progress towards your degree and certification of effort.

Students who are actively working toward their degree completion and have completed all credits required for the degree must enroll each semester for Continuous Registration. Students must continue to pay the corresponding Continuous Registration fee each semester until all degree requirements are completed, including removing incomplete grades, passing the comprehensive examination, or completing a thesis or dissertation

Students who are working at the full time level of six or more credit equivalency register for GRAD 9020. Students working at less than full time level (one to five credit equivalency) register for GRAD 9010.

Students who are not working towards completion of their degree and do not register in GRAD 9010 or GRAD 9020 for a period of one calendar year and are not on an approved leave of absence will be deactivated from the College.

APPENDIX 1 - CEE Accelerated Masters (AMP) Program Student Timeline

Spring semester of junior year of BS degree and not later than August prior to the senior year	<ul style="list-style-type: none"> • Apply for AMP degree https://www.uvm.edu/cems/accelerated_masters_programs • Determine which 6 credits of CEE classes will double-count for BS and MS degrees • Identify and gain pre-approval for which (if any) graduate CEE class (3 cr max) taken during the senior year will count toward the MS degree. (Notify that instructor that you are an AMP student taking their course for graduate credit). • Read and become familiar with the degree requirements as detailed in the CEE Graduate Student Handbook
1 st semester of MS (typically Fall Semester, although could be Summer Semester following the BS degree)	<ul style="list-style-type: none"> • Identify a faculty advisor • Together with your advisor, determine which AMP degree option you will select (Table 2). • Develop a research idea and define timeline (i.e., will a Summer semester be required? when do you aim to graduate? And therefore which semester will be your final semester) • Set up regular meetings with your advisor (weekly to biweekly) • Identify your studies committee. • Present to your Committee a research project proposal and timeline before the end of the semester • Register for CEE 6391 or CEE 6392 (3 – 6 credits) in coming semester(s)
2 nd semester of MS (typically Spring Semester)	<ul style="list-style-type: none"> • Continue regular meetings with your advisor to evaluate project progress and timeline, refine your research plan, and ensure that minimum course requirements for graduation are being met. • Schedule and host a meeting to update your Committee on research progress • Submit an abstract for the UVM Student Research Conference and present at the conference (if 2nd Semester = Spring semester)
3 rd semester of MS (if required) (typically Summer semester)	<ul style="list-style-type: none"> • Continue regular meetings with your Advisor to evaluate project progress and timeline, refine your research plan, and ensure that minimum course requirements for graduation are being met. • Schedule an update meeting for your Committee (if needed)
In final semester	<ul style="list-style-type: none"> • Submit the Intent to Graduate Form to the Grad College, with a cc to your Advisor. (Official Deadlines are August 1 for October graduation; November 1 for January; February 1 for May graduation). • Schedule a meeting with the Graduate College (typically, Bethany Sheldon) to ensure that your course work (completed, and in progress) will meet minimum requirements for graduation.

	<ul style="list-style-type: none"> • Schedule the Oral Defense with your Committee (generally no later than 2 weeks before end of semester) – allow for 2 hours • Present the results of your research project in CEE Grad Seminar (this can be a practice run for the final Oral Defense, or it can be the Oral Defense itself) • Deliver draft Research Report to your Committee (at least 2 weeks in advance of your scheduled Oral Defense date) • Carry out the Oral Defense with your Committee • Deliver final Research Report addressing the Committee’s review comments (within 2 weeks after your Oral Defense and before graduation)
Within 3 days after Oral Defense	Defense Examination Record Form - return this completed form to the CEE Graduate Coordinator and the Graduate College with a cc to your Committee.

APPENDIX 2 –Forms

(See next page)

Programs of Civil and Environmental Engineering
University of Vermont

Dissertation or Thesis Proposal Defense Form

(Return to Graduate Program Coordinator)

Student Name _____

Date of Proposal Defense _____

Title of Proposal _____

Decision (pass, fail, retake) _____

Studies Committee Members and Signatures

1) _____

2) _____

3) _____

4) _____

5) _____

6) _____

Programs of Civil and Environmental Engineering
University of Vermont

Comprehensive Exam Form

(Return to Graduate Program Coordinator)

Student Name _____

Date of Exam _____

Decision (pass, fail, retake) _____

Comprehensive Exam Committee Members and Signatures

1) _____

2) _____

3) _____

4) _____

5) _____

6) _____