

Graduate Student and Graduate Faculty Handbook

Department of Civil and Construction Engineering (CCE)

Western Michigan University

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1 INTRODUCTION

The “CCE Graduate Student and Graduate Faculty Handbook” is intended for use by Graduate Students enrolled in the Department of Civil and Construction Engineering at Western Michigan University and the Graduate Faculty who supervise them.

The department offers the following graduate degrees:

- Master of Science in Civil Engineering
- Ph. D. in Civil Engineering

The primary areas of focus in the department at the graduate level are:

- Construction Engineering and Management,
- Structural Engineering, and
- Transportation Engineering.

Degree program descriptions that Graduate Students and Graduate Faculty need to be familiar with are included in this handbook. For additional information, please use the pull down arrow to visit the University Graduate Catalog to learn more about each of these degree programs at:

<http://catalog.wmich.edu/index.php>

In addition, the College of Engineering and Applied Sciences offers a doctoral degree, with a concentration or track in “Engineering” or in “Applied Sciences.” Applicants interested in pursuing a doctoral degree in the area of interdisciplinary research should consider this option, as explained using the web link below:

http://catalog.wmich.edu/preview_program.php?catoid=27&poid=7727&returnto=1136

The material contained within this guide is intended to provide information about topics related to graduate education and research. Every effort has been made for this material to be consistent with University policy and materials published in the University Graduate Catalog. In the event that information contained herein conflicts with University policy, the policy as published in the University Graduate Catalog at the time a student initially enrolls in the graduate program will be followed.

2 MASTER OF SCIENCE IN CIVIL ENGINEERING PROGRAM

The primary areas of focus in the department at the graduate level are:

- Construction engineering and management,
- Structural engineering, and
- Transportation engineering.

Through the available program options, students can earn the degree on a full-time or part-time basis and can have a design (i.e. project) or research (i.e., thesis) orientation.

2.1 The Objectives of the Master of Science in Civil Engineering

1. Maintain a high quality graduate program.
 - a. Graduates are adequately prepared for entrance into advanced careers or further studies.
2. Generate new knowledge and engineering methods to serve the state, the nation, and the global community.
 - a. Graduates successfully complete a thesis or design project to address a civil engineering problem using sound engineering principles and techniques.
 - b. Graduate students' theses solve an engineering problem of importance to the state, the nation, or the global community.

2.2 Application and Admission Requirements

Students entering the proposed master's degree program are expected to have a background equivalent to that of a student graduating from the department's undergraduate civil and construction engineering degree programs, or to obtain such background through specified prerequisite coursework.

To apply, students need:

- Applications: international admissions or resident (visit <http://www.wmich.edu/admissions/apply>)
- Transcripts
- Three reference letters
- Statement of purpose
- English proficiency test scores (if applicable).

2.3 Graduation Requirements

To graduate from the chosen master's degree program, all students must complete the required courses and must satisfy the requirements of one of three program options. Required courses are:

- CCE 6020 Modeling and Analysis of Civil Engineering Applications (3 credits; all options)
- CCE 6100 Civil Systems Analysis (3 credits; all options)
- CCE 7000 Master's Thesis (6 credits; thesis option only)
- CCE 6850 Advanced Design Project (3 credits; project option only)

Regardless of the degree option selected, at least 50 percent of the total credit hours applied to the degree, excluding thesis and design project, must be CCE courses and at least 2/3 of the credit hours applied to the degree must be taught by a department in the College of Engineering and Applied Sciences. Further, no more than three credit hours of independent study courses can be applied to the degree. The program options and additional degree requirements are:

Option one: Research (Thesis) - 30 Credit Hours

Option two: Professional Practice ((Project) - 30 Credit Hours

Option three: Technical and Management Development (Course only) - 36 Credit Hours)¹.

Figure 2.1 summarizes the requirements for options available.

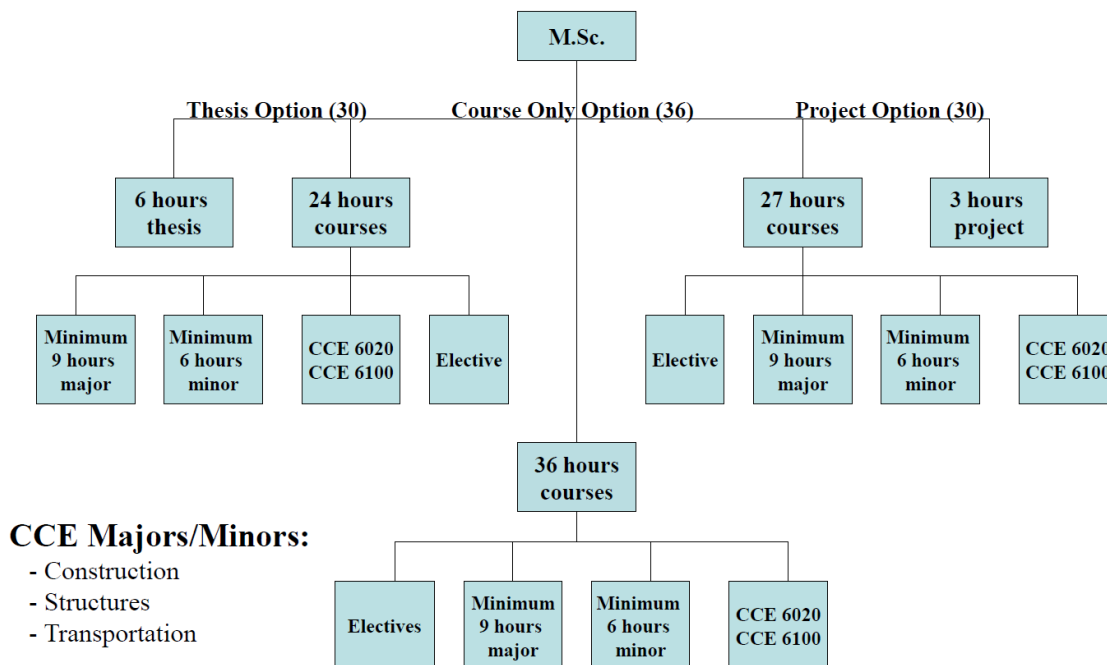


Figure 2.1. MS Program Options

¹ Students enrolled in this option are not eligible for Graduate Assistantship (GA.)

A student who completes a thesis or a project must submit the Thesis/Project Documentation Form (Appendix 7.1) to the department. View more information on the Master of Science in Civil Engineering in the graduate catalog (http://catalog.wmich.edu/preview_program.php?catoid=29&poid=8594&returnto=1232).

2.4 Accelerated Masters of Science in Civil Engineering

The accelerated degree program (ADP) allows undergraduate students currently in the civil and construction engineering programs an opportunity to complete the requirements for both the bachelor's and master's degrees at an accelerated pace.

The undergraduate students qualifying for the ADP may count up to nine, but not less than six, credit hours of 5000 level courses taken during their undergraduate studies toward a master's degree in civil engineering within 30 months of completing their bachelor's degree in civil engineering or construction engineering. These students may choose to pursue a master of science in civil engineering degree under options one, two and three described in the graduate catalog.

The ADP will allow an undergraduate student majoring in civil or construction engineering to complete an accelerated bachelor or master of science in civil engineering by completing either 147 combined graduate and undergraduate credit hours (in the master's program by selecting option one and option two, or 153 combined graduate or undergraduate credit hours by selecting option three).

2.4.1 Application

A prospective student who meets the eligibility requirements must set up a meeting with the undergraduate advisor and the graduate advisor to develop plans of work for the bachelor's and master's degree programs before completing 96 credit hours in their undergraduate programs (see criteria for admission in Section 2.4.2 for details).

Before admission to the ADP can be finalized, students must submit the standard application for admission to the Office of Admissions including:

1. An application.
2. The graduate school application fee.
3. A copy of all transcripts.
4. A permanent plan of study, signed by the prospective student, the undergraduate advisor and the graduate advisor.

The permanent plan of study for the master's degree must clearly indicate:

1. The 5000 level courses (a maximum of nine graduate credit hours) that will be counted for both bachelor's and master's degrees.

2. The graduation date for the master's degree that meets the time limit for the ADP (i.e. obtaining a master's degree in civil engineering within 30 months of completing the bachelor's degree).

Any changes to the ADP plan of graduate work must be submitted in writing and approved by the graduate advisor and graduate dean.

2.4.2 Criteria for admission

Permission to pursue an ADP does not guarantee admission to the Graduate College. Admission is contingent on meeting the following eligibility requirements at the time of entering the graduate program:

1. Students must declare their interest by contacting the CCE Graduate Advisor and/or the Department Chair before completing 96 credit hours in their undergraduate programs, including credits earned from advanced placement.
2. Transfer students must have completed a minimum of 30 credit hours as a full-time student at Western Michigan University.
3. Students must have a minimum accumulated grade point average GPA of 3.0 at WMU.

2.4.3 Requirements for participation and graduation

1. Students must complete the bachelor's degree prior to entering the master's program. Students in the ADP may not elect to by-pass the bachelor's degree.
2. Students will only be allowed to count a maximum of nine 5000 level credits taken during their undergraduate studies toward their master's degree.
3. Students must receive a grade of B, 3.0 or better in the 5000 level courses taken during their undergraduate studies. Courses with a grade of CB or below cannot be counted toward their master's degree.
4. No more than nine hours of 5000 level coursework may be counted towards the student's bachelor degree.
5. Students must complete the master's degree within 30 months from the completion of the bachelor's degree. If the master's program could not be completed within these time limits, none of the 5000 level courses specified in Section 2.4.1 can be counted toward the master's degree. Extension of this timeline may be granted by the Graduate Advisor and the Department Chair and only under special circumstances.

2.4.4 Continuing eligibility

1. It is the responsibility of the student to recognize his or her eligibility status.
2. A student completing the bachelor's degree requirements with an accumulated GPA of less than 3.0 is automatically terminated from the ADP.
3. A student who does not follow the approved plan of graduate work may become ineligible to participate in the ADP.
4. A student who is ineligible to participate in (or withdraws from) the ADP no longer qualifies for transfer of courses specified in Section 2.3.1 towards a master's degrees. These

courses, however, may be counted toward the student's bachelor's degree upon the discretion of the undergraduate adviser.

5. A student who becomes ineligible to participate in the ADP must be informed by the graduate advisor in writing of his or her ineligibility. A copy of this letter to the student shall be sent to the Graduate College.

2.4.5 Withdrawal

A student may at any time withdraw from an approved ADP by informing the director of undergraduate programs and the graduate advisor in writing. A copy of this request to withdraw must be sent to the Graduate College.

3 DOCTOR OF PHILOSOPHY (Ph.D.) IN CIVIL ENGINEERING PROGRAM

The Doctor of Philosophy (Ph.D.) in Civil Engineering is designed to provide a flexible vehicle to address new and emerging areas of research in civil engineering that are within interest and expertise of the civil engineering faculty.

3.1 Objectives of the Ph.D. in Civil Engineering

- Apply fundamental concepts of civil engineering in a sub-discipline of interest.
- Identify and formulate innovative research questions in new and emerging topics that are of national and international interest through comprehensive literature review and synthesis.
- Develop and execute a research plan for the identified research question(s).
- Disseminate research results through the completion of a dissertation manuscript and through journal publications and professional presentations.

3.2 Application and Admission Requirements

In addition to the University minimum Ph.D. admission requirements as outlined in the Graduate Catalog, all applicants to the Ph.D. in Civil Engineering program are expected to meet the following minimum requirements for admission:

1. The student must contact a faculty member who agrees to advise the student and who will serve as the chair of the Ph.D. dissertation committee.
2. The student must have a bachelor's and master's degree in civil engineering or a closely related field from an accredited institution.
3. The student must submit an official transcript from each institution attended since high school.
4. The student must have an overall minimum grade point average of 3.25 at the master's and 3.0 at the bachelor's levels.
5. The student must provide the General GRE test scores.
6. The student must provide a statement of purpose describing the applicant's research interests and professional goals.
7. The student must provide at least two letters of recommendation from previous advisors/supervisors.

To apply, students need:

1. Application (international admissions or resident). Select Ph.D. in Civil Engineering (visit <http://www.wmich.edu/admissions/apply>).
2. English proficiency test scores (if applicable).

3. Resume.

3.3 Ph.D. Program Requirements

In addition to the minimum University requirements listed in the graduate catalog, the following must be fulfilled for the Ph.D. in Civil Engineering program:

1. **Minimum Credit Hours:** After admission into this Ph.D. program, the majority of credits taken at Western Michigan University must be from CCE and CEAS (excluding thesis and dissertation credits). A minimum of thirty (30) graduate-level credit hours, excluding the dissertation, beyond the master's is required at Western Michigan University in an approved program of study.
2. **Program of Study:** A program of study must be completed in the first year of enrollment. This program of study is uniquely defined and approved by the Ph.D. committee chair, the department chair, and the Dean of the Graduate College. The exact distribution of courses, seminars, and research will depend upon the program and may vary from one student to another. Each student is required to complete a dissertation.
3. **Doctoral Dissertation:** Minimum of fifteen (15) credit hours of Doctoral Dissertation (CCE 7300) are required.
4. **Research Tools:** Two appropriate research tools courses are required. Such research tools may include, but are not limited to, statistics, numerical analysis, mathematics, research methodology, and computing. These are determined by the Ph.D. committee chair and the student.
5. **Candidacy and Examination Requirements:** Passing the following three examinations in the intended specialty area is required. These exams are designed and administered by the dissertation committee.
 - 5.1. **Qualifying Exam:** Before admission to candidacy for the doctoral degree, the student must take the qualifying examination within one (1) calendar year after admission to the Ph.D. program.

This exam covers the student's competence in his/her field of specialization (i.e., construction engineering, structural engineering, or transportation engineering). The Qualifying Exam Committee will solicit potential examination questions from the faculty of each area of specialization. The qualifying exam is administered by the student's advisor and the Qualifying Exam Committee. The performance of the student in the qualifying exam is used by the committee to determine competence of the student to continue in the doctoral program. The Qualifying Exam Committee can directly find the student competent to continue in the program or the committee can suggest additional course work and modifications to the Plan of Study.

Evaluation Criteria:

- The exam will be offered twice a year –in May and November
- A student must pass the qualifying exam in no more than two (2) attempts.
- To pass the exam, a student must meet the following two criteria:
 - Earn 70% or higher on average
 - Earn no less than 40% in any examination area described below.
- The student who earns at least 70% on average but fails to earn at least 40% in no more than TWO areas may pass by taking an oral exam in the areas the student failed. The oral exam will be scheduled in a month after the qualifying exam date.
- The student who earns between 60% and 70% on average but fails to earn at least 40% in no more than ONE area may pass by taking an oral exam in all areas of the exam. The oral exam will be scheduled in a month after the qualifying exam date.
- The student who did not pass the qualifying exam under one of the above conditions must retake the exam within a year. A second failure will result in dismissal from the program.

Examination Areas by Specializations:

Field of Specialization		
Construction	Structures	Transportation
Examination Areas		
<ul style="list-style-type: none">• Bidding and Estimating• Scheduling• Contracts and Project Delivery Methods• Construction Safety• Financial Management	<ul style="list-style-type: none">• Structural Analysis• Structural Mechanics• Structural Design• Structural Dynamics• Foundation Analysis and Design	<ul style="list-style-type: none">• Systems Analysis• Transportation Planning• Traffic Operations• Highway Design• Traffic Safety

Exam Format:

- The qualifying exam committee determines the format of the qualifying examination for each student.
 - Use of other electronic items, other than an approved calculator, will be determined by the Qualifying Exam Committee and communicated to the candidates prior to the exam date.
- 5.2. **Comprehensive Exam:** Each doctoral candidate must obtain approval from his or her dissertation committee for a dissertation topic and research plan through the comprehensive exam. The exam requires a written proposal and oral presentation, and is typically taken near the end of the course work outlined in the doctoral program of study. The comprehensive exam must be completed within one year after passing the qualifying exam. Upon passing the comprehensive exam, the student is advanced to the Ph.D. candidate status.

- 5.3. **Dissertation Defense:** The defense takes place at the conclusion of the dissertation research with the approval of the committee. Upon a successful defense, as determined by the dissertation committee, the student will submit the dissertation to the Graduate College after obtaining approval from all members of the dissertation committee. In addition to any other Graduate College forms, the student will complete and submit the Dissertation Documentation form (Appendix 7.1) to the department.
- 5.4. **Research Publications and Presentations:** At least one journal publication and two conference paper presentations from student's dissertation research.

3.4 Doctoral Dissertation Committee

A doctoral dissertation committee shall be appointed for each student during the first year of enrollment. The purpose of the dissertation committee is to:

1. Develop, with the student, the program of study for the intended specialty field under the Ph.D. program;
2. Design and administer the required Ph.D. examinations; and
3. Provide the technical guidance to the student during the dissertation portion of the doctoral program.

The doctoral dissertation committee shall consist of at least three faculty members. A minimum of two members must be from the Civil and Construction Engineering department including the committee chair and a minimum of one member from outside the department. All members of the committee must be either full or associate members of the graduate faculty. At the discretion of the committee chair, committee members may include external members from other universities and industry.

4 IMPORTANT FORMS

The description and use of forms presented here is not intended to be all inclusive or exhaustive. Students and their faculty advisor are ultimately responsible for making sure a student is making progress to degree. Forms are turned in to the department as the first step in the approval review process. A completed form has to be approved by the department, the College, and the Graduate College, as needed. Forms that can be filled in electronically can be found at:
<http://www.wmich.edu/grad/forms>

Alternatively, forms can be found at the department website at:

1. <http://wmich.edu/civil-construction/forstudents/graduateforms> (for Master's Program).
2. <http://wmich.edu/civil-construction/phdprocess> (for Ph.D. Program).

Form 1: Notification of Appointment to a Dissertation, Thesis or Specialist Project Committee

- Completed by all masters thesis research students.
- Form 1 is not used by masters students in the non-thesis option.
- Completed by students in the PhD in Civil and Construction Engineering program within first year of starting the program

Form 2: Application for Permission to Elect

- Used by any student for their initial enrollment in specified courses such as CCE 7000 (Master's Thesis), CCE 7100 (Independent Research), and CCE 7300 (Doctoral Dissertation).
- Students requesting to enroll in 7000 or 7300 must complete Form 1 at the same time, or complete Form 1 before they complete Form 2.
- An additional permission form is not needed for successive enrollments in 7000 and 7300.
- Once a student has enrolled in 7000 or 7300 credit hours, they must be continually enrolled in at least one credit hour of that course each Fall and Spring semester until they graduate.
- Used for each enrollment request in 7100.

Form 3: Graduate Student Permanent Program – Master's Level

- To be completed by all MS research thesis students before the start of their third semester of enrollment, with input from their thesis research committee.
- To be completed by all MS non-thesis students before the start of their third semester of enrollment, with input from their program's Graduate Advisor.

Form 4: Doctoral Program of Study

- Completed by all doctoral students within first year of starting the program.

Form 5: Doctoral Dissertation, Thesis or Specialist Project Proposal Approval Form

- Used by all MS research thesis students to document completion of the oral defense of their thesis research proposal.
- Used by all doctoral students to document completion of the Comprehensive Exam – Defense of an Original Research Proposal as defined in Section 3.3 of this document.

Form 6: Admission to Doctoral Candidacy

- To be filed with the Graduate College upon successful completion of the listed items. This includes the Qualifying Exam and Comprehensive Exam, and all academic course work credit hours.

Form 7: Dissertation Defense Scheduling Form

- PhD students must apply for and receive permission from the Graduate College before their final doctoral dissertation defense is scheduled. The Dissertation Defense Form should be completed *at least two weeks prior to the proposed defense*.
- Masters students will schedule their final thesis defense through the department's Office Coordinator. A copy of the completed thesis must be deposited in the main department office for public review at least 10 business days before the final thesis defense.

Form 8: Thesis or Dissertation Approval

- Used by MS or PhD students after a successful oral defense of their thesis or dissertation. This form is part of the final copy of the thesis or dissertation that is submitted to the Graduate College for review.
- Depending on how many committee members served on the research committee, the forms are different and are found at:

<http://www.wmich.edu/grad/dissertation-approval>

Form 9: Under Enrollment Permission Form for Graduate Appointees

- Masters or PhD students who are being funded as a TA or RA
- AND they have completed all academic course work credit hours
- AND the student is entering their final Fall or Spring semester of working on research before graduation.
- Students can apply to enroll in less than 6 credit hours, and if approved, they will still be considered full-time Graduate Students even though they do not meet the minimum enrollment of 6 credit hours in order to receive funding as a TA or RA.
- An approved under enrollment form also allows a student's visa status to be counted as full-time enrollment.

5 GENERAL INFORMATION, POLICIES, GUIDELINES AND PROCEDURES

5.1 University Computer Account and E-mail Address

If you have a University student identification number (WIN), the University will have sent you your userid and initial password for logging onto the University computer system.

Please use your University e-mail address when contacting faculty, and check it regularly for information that may be sent to you. Include a descriptive subject line, or your e-mail will probably get caught in a filter as SPAM.

5.2 Department Office Space

Graduate Student carrels for the department's Graduate Students are located in several areas in the G areas of Elson Floyd Hall on Parkview Campus. All full-time enrolled Graduate Students are eligible to receive a carrel assignment. The department Office Coordinator works with the Program Advisors at the start of the Fall and Spring semesters to identify available carrel spaces to assign to new students, as space allows. Priority to receive a carrel assignment for new students is given to those who are working as a Teaching Assistant (TA).

Graduate Students are expected to keep their carrels in a reasonably organized fashion. Like faculty, graduate students are expected to remove the trash from their graduate carrels since the custodians do not empty trash from individual office areas. Refuse must be placed in the large trash barrels available in the building hallways or student study areas. This is the same policy that is applied to faculty office areas. The department reserves the right to remove noxious materials from Graduate Student office areas without warning if the materials are negatively affecting other people. Cardboard boxes must be broken down and carried to the recycle bins in the main collection area. They are not to be left in the hallway for custodial pickup.

5.3 Mailboxes

Mailboxes for Graduate Students are in the main department office, room G253 Floyd Hall. All TA/DA Graduate Students will have an assigned mailbox space. Mailboxes are reviewed by the department's Office Coordinator at the start of each new semester to assign mailboxes for new students.

5.4 Copier and Fax Machine

A copier and fax machine are available for TA/DAs in room G253 Floyd Hall. Please ask the office staff for training or assistance. Making a large number of copies for a course where you have been assigned as a teaching assistant should be done in the College's Copy Center, found in room C-242 Floyd Hall. Please work with the faculty member supervising you as a teaching assistant for how to order copies to be made through the College's Copy Center. For coursework

and other related material, students must use their allocated quota through the college computer center.

5.5 University Keys and Swipe Card Access

Graduate Students who need room, laboratory, or building access in order to perform duties as a Teaching or Research Assistants (TA or RA) must request access permission from their faculty supervisor and then coordinate with the Office Coordinator in room G253 Floyd Hall before keys will be issued or swipe access granted using your University ID card.

Graduate Students must understand that it is a privilege to be granted keys or swipe access to University facilities. Abuse of facilities or failure to follow department safety policies can result in immediate revocation of access.

Graduate Students will not loan their University keys or ID card to another person who will use them. A Graduate Student loaning their University keys or ID card will have their access to University facilities revoked.

Students will return any University keys when requested to do so, as they are University property. Students who will not be on campus during the summer or the winter break between the Fall and Spring semesters will turn in all University keys to the department's Office Coordinator before they leave campus. Keys will be returned to them when they return to campus to resume their graduate program activities.

Students who do not return keys when they are requested to do so will have a "hold" placed on their University student account. This will restrict a student's ability to register for classes, and will prevent a student from graduating.

5.6 Laboratory Equipment

At no time can laboratory equipment be stored or kept in a Graduate Student carrel. Laboratory materials and equipment belong in the appropriate laboratory where you are working. The department's Laboratory Safety Policy is found as Appendix 7.2.

Waste materials are to be disposed of in accordance with good laboratory practice. Consult with your faculty supervisor if you are unsure of what to do. Materials that are not labeled correctly can be removed at any time without warning and be disposed of by University personnel.

5.7 Required Trainings (TA and RA)

5.7.1 Graduate Appointee Training and International Program

ALL new graduate assistants and doctoral associates on an appointment for the first time or have accepted a teaching appointment for the first time, are required to attend the University-wide Graduate Appointee Training Workshop that is presented by the Graduate College the week before the fall term begins.

International students who have accepted funding as a TA or RA are required to attend the International TA/GA training offered by the Center for English Language and Culture for International Students (CELCIS). Both of these programs occur during the week before the start of the Fall semester classes, and you will have been contacted by e-mail about your enrollment in these programs. If you do not complete this training, the department may cancel your funding as a TA or RA.

5.7.2 Michigan “Right to Know” Law

Graduate Students working in a teaching or a research laboratory must complete the Michigan “Right to Know” training that is offered periodically by the University’s Office of Occupational Health and Safety. This training includes how to safely handle and dispose of chemicals, University emergency procedures and reporting requirements, basic personal protective equipment usage, and other topics. Students who do not complete this required training when requested to do so can have their funding as a TA or RA cancelled, and their access to University facilities revoked.

5.7.3 Responsible Conduct of Research

All new graduate students are required to complete the “Responsible Conduct of Research (RCR)” Course in Elearning. Students are automatically enrolled, based on their admission term. Graduate students will receive an introductory email, sent to their WMU email address, notifying them about this requirement. There is no fee for the course, and no credit hours are earned. This requirement is a university-wide requirement and is not directly associated with any specific graduate program. For more details, please visit <http://www.wmich.edu/grad/current-students/responsible-research>.

5.8 Graduate Courses in the CCE Department

Most Graduate courses in the department (those with a CCE prefix) are offered on a rotational cycle over a period of two years. All required courses for the degree programs are offered at least once in each two-year cycle, as are most of the elective courses. These are CCE 6020 Modeling and Analysis of Civil Engineering Applications, CCE 6100 Civil Systems Analysis. Students need to enroll in and successfully complete required degree courses when they are offered in order to make continual progress towards completing their degree program.

5.9 Important Calendar Dates for Everyone

Students receiving funding as a TA or RA for Fall are required to be on campus and actively engaged in work starting the last week of August through the 2nd Friday of December.

Students receiving funding for the Spring semester must remember that the first day of work for Spring is the 2nd Monday of January, and you are required to be here. The end date for the Spring semester is the last Friday of April.

University Academic Calendars: <http://www.wmich.edu/registrar/calendars/>

5.10 Process for Reviewing Graduate Student Performance

All Graduate Students will be reviewed biannually (see Section 5.11.1) by faculty supervising their efforts as a TA or RA and their program's Graduate Advisor to provide information for possible TA or RA funding. In addition, CCE Ph.D. Students will be reviewed annually (see Section 5.11.2) based on their educational and professional activities.

5.10.1 Biannual Review of Funded Graduate Student for Continuing TA or RA Support

All Graduate Students who are making progress towards completing their degree program are considered for any available funding as a Teaching Assistant (TA) or Research Assistant (RA). Students not making progress toward completing their degree program (also referred to as "progress to degree") are the last students to be considered for any possible funding. TA funds and a limited amount of RA funds come from the University, and are granted by the department.

The Department Chair, the Program's Graduate Advisor and the faculty supervising a graduate student receiving TA or RA funding will make a biannual review of a student's progress to degree and their performance as a TA or RA. Progress to degree will be measured by timely completion of required University forms, as discussed in Section 4. A report will be given to all Graduate Faculty each semester about the progress of all Graduate Students enrolled in that program.

Criteria for awarding TA or RA funds that are provided by the University (in order of ranking importance):

1. Availability of funds
2. Departmental needs
3. Graduate Student Review Report and Progress to Degree
4. Background and expertise specified by the faculty in-charge of the course.
5. GPA or GRE scores (applies to new students only)
6. Seniority in the CCE Graduate Program

Most RA funds come from external contracts that faculty members have received and that they are working on. Faculty with a funded research contract will make the final decision on who they will offer RA support.

Forms that help document progress to degree are listed in Section 4. Forms that can be filled in electronically can be found at: <http://www.wmich.edu/grad/forms>.

All students receiving TA or RA funding during Fall will be reviewed in writing by their faculty supervisor and the program's Graduate Advisor in the second week of November. This input will be used to help determine offers of funding for the following Spring semester. Offers for TA or RA funding for Spring semester will be made in late November.

All students receiving funding during Spring will be reviewed in writing by their faculty supervisor and the program's Graduate Advisor in the last week of February. This input will be used to help determine offers of funding for the following Fall semester. Offers for TA or RA funding for Fall

will be made beginning late March. An example form for this biannual review is found as Appendix 7.3.

5.10.2 Annual Review of CCE Ph.D. Graduate Students

All CCE Ph.D. Graduate Students will be reviewed annually based on their educational and professional activities. Your annual review is due to your Faculty Advisors on or before October 1st of each year. An Academic Year is from July 1 to June 30. An example of the form used for the annual review is found in Appendix 7.4. The annual review is intended to provide more in-depth feedback from Graduate Faculty to Graduate Students on their progress to degree and their future career goals. The annual review will be retained in the Graduate Student's department file for later review and to help the department document Graduate Student professional activities such as presentations, publications, proposal writing and awards, records of invention, and other such items.

5.11 Graduate Program Dismissal Policy

Graduate Students who fail to make adequate progress towards their degree will be dismissed from the program. When reviewing the progress of Graduate Students, the program's Graduate Advisor and the Program Committee takes into account a number of factors. While the following criteria serve as guidelines, these are not to be considered the only requirements.

Guidelines of the Graduate College for academic standards include the following:

- Overall grade point average in the degree program must be at least 3.0.
- Whenever the GPA for a particular semester is less than 3.0, but the overall GPA is 3.0 or above, the student will be warned.
- If the overall GPA falls below 3.0, the student is placed on probation for one semester.
- If the student makes some improvement to the overall GPA, although still below the standard, the student can continue on probation for one additional enrollment period, at the department's discretion.

Probation is removed when a Graduate Student's GPA is at least 3.0.

If a student fails to increase the overall GPA while on probation, or fails to reach the standard GPA on a continuation of probation, he/she will be dismissed from the University. Dismissed students must apply for readmission, but they must remain out at least one full 15-week semester.

A student may appeal to the Program Committee or the department, and ultimately the Graduate College, using the process described in Section 5.13.

Additional departmental guidelines:

- Failure to make progress towards completing your degree program, as discussed previously, may result in dismissal from the graduate program.
- Failure to participate in the review process for two semesters is grounds for dismissal.

- Failure to complete the Qualifying Exam and/or the Comprehensive Exam by the required deadlines, as explained by Section 3.3 will result in dismissal from the graduate program.

An unsatisfactory evaluation in the review process will result in the student being placed on probation for one year. During that year, the student must remedy the issues outlined in the review and make obvious progress towards their degree. Probation will be removed if the next evaluation results in a satisfactory or satisfactory with reservations.

A second unsatisfactory evaluation in the review process is grounds for dismissal.

Students found responsible for academic misconduct may be dismissed at the discretion of their thesis/dissertation committee or the Program Committee, if no thesis/dissertation committee is formed.

5.12 Process for Graduate Students to Request an Exception or Appeal a Decision

Graduate Students who wish to have an exception on their behalf to graduate program timelines, guidelines or other items will make a written request to the program's Graduate Advisor. At a minimum, the written request will include:

- The student's name and degree program.
- The timeline, guideline, or other item the student wants consideration or review of for a possible exception.
- The reason(s) for requesting an exception.
- A possible remedy or outcome the student feels is acceptable as the exception.

The program's Graduate Advisor will review the written request with the appropriate Program Committee. The Program Committee will make a recommendation to the department chair and inform the student in writing of the recommendation. The student will meet with the department chair to discuss their need for an exception. The department chair will make a decision on the disposition of the request for an exception, and communicate in writing the decision and the reason(s) for the decision to the student and to the appropriate Program Committee. Appeals of the decision of the department chair may be made in writing to the Associate Dean of the College who oversees graduate programs and research activities. A Graduate Student may appeal a decision made at the College level to the Dean of the Graduate College.

Graduate Students who do not agree with advice or service provided by a program's Graduate Advisor will meet with the department chair to begin any needed appeal process, as described above.

5.13 Plagiarism and Academic Integrity

It is the responsibility of each Graduate Student to make sure their work meets the standards for honesty and integrity in regards to your studies.

Students are responsible for making themselves aware of and understanding the University policies and procedures that pertain to Academic Honesty. These policies include cheating, fabrication, falsification and forgery, multiple submission, plagiarism, complicity and computer misuse. The academic policies addressing Student Rights and Responsibilities can be found in the Undergraduate Catalog at <http://catalog.wmich.edu/content.php?catoid=24&navoid=974> and the Graduate Catalog at <http://catalog.wmich.edu/content.php?catoid=25&navoid=1030>. If there is reason to believe you have been involved in academic dishonesty, you will be referred to the Office of Student Conduct. You will be given the opportunity to review the charge(s) and if you believe you are not responsible, you will have the opportunity for a hearing. You should consult with your instructor if you are uncertain about an issue of academic honesty prior to the submission of an assignment or test.

In addition, students are encouraged to access the Code of Honor, as well as resources and general academic policies on such issues as diversity, religious observance, and student disabilities:

- Office of Student Conduct www.wmich.edu/conduct
- Division of Student Affairs www.wmich.edu/students/diversity
- Registrar's Office www.wmich.edu/registrar and <http://www.wmich.edu/registrar/calendars/interfaith>
- Disability Services for Students www.wmich.edu/disabilityservices.

5.14 Planning to Graduate? You Must Complete a Graduation Audit

You must apply for your Graduation Audit at least six months before your planned graduation date. To complete a Graduation Audit, an accurate and up-to-date Permanent Program of Study form must be on file with the Registrar's Office. Please refer to the website below regarding the Graduation Audit process.

<http://www.wmich.edu/registrar/graduation/>

Deadlines for completing your thesis or dissertation are found at:

<http://www.wmich.edu/grad/dissertation-deadlines>

5.15 Graduate College Funding Opportunities

For Travel and Research Fund Grants, Fellowships, Scholarships, and other items, please visit:

<http://www.wmich.edu/grad/fellowships-grants>

These are funding opportunities offered by the WMU Graduate College. This includes information on the Graduate Student Research Fund and the Graduate Student Travel Fund.

5.16 Graduate College Awards Offered

Students in good standing in the department are eligible to be nominated by faculty for awards during each academic year. Students who are nominated will need to work with the faculty member that nominated them in order to complete and submit the award nomination materials.

- Graduate Research and Creative Scholar Award – Master’s Level (1 departmental recipient/year)
- Graduate Research and Creative Scholar Award – Doctoral Level (1 departmental recipient/year)
- All-University Graduate Research and Creative Scholar Award (1 departmental nominee/year)
- Graduate Teaching Effectiveness Award – Master’s Level (1 departmental recipient/year)
- Graduate Teaching Effectiveness Award – Doctoral Level (1 departmental recipient/year)
- All-University Graduate Teaching Effectiveness Award (1 departmental nominee/year)

These awards do not include monetary prizes, but they do look great as a part of your personal resume or vitae when you are looking for employment.

5.17 Responsibilities of a Program’s Graduate Advisor

The responsibilities or activities of a program’s Graduate Advisor include the following:

- Member of the academic area Program Committee, with full voting rights.
- Regularly reviews the University Graduate Catalog and is familiar with changes in University policies that impact graduate education and research.
- Attend meetings organized by the Graduate College for Graduate Advisors or Coordinators.
- Act as a point of contact for the Registrar’s Office or the Office of International Student Services about Graduate Students. This is a result of being listed in the University Graduate Catalog as a program’s Graduate Advisor.
- Facilitate review of Graduate Student admission applications in cooperation with other faculty.

- Organize and hold an orientation meeting with all Graduate Students in their program at least once per year, usually at the start of the Fall semester.
- Provide advice to Graduate Students on selecting courses that will help them complete their degree program.
- Provide assistance to Graduate Faculty and Graduate Students in completing University forms and other paper work needed to document a student's progress to degree. Review forms for correctness before they are submitted for departmental, College, or Graduate College review.
- Organize graduate program assessment activities in cooperation with other faculty.
- Provide the program Graduate Faculty with a written update on the progress to degree of students at least once each Fall and Spring semester.
- Work with the department's Office Coordinator as needed on office space, keys, or other logistics issues that involve Graduate Students.
- Distribute e-mail or other documents received from the Graduate College or other University offices to Graduate Students and Graduate Faculty for their review and possible action.
- Advise Graduate Students in a manner that best assists and supports Graduate Students to build their skills and interests in regards to their future career goals.
- Perform other duties that may be assigned by the department chair.

5.18 Responsibilities of a Member of the Department's Graduate Faculty

The responsibilities or activities of a member of a program's Graduate Faculty include the following:

- Determine if they are eligible to be a chair of a thesis or dissertation research committee by reviewing the Graduate Faculty Report at: <http://www.wmich.edu/grad/faculty-staff>
- Be familiar with the University Graduate Catalog to effectively advise students about University policies and program offerings.
- Be familiar with how to properly complete the forms and paper work required by the University in regards to a Graduate Student's progress to degree. Many of the required forms may be found at: <http://www.wmich.edu/grad/forms>
- Participate in a collegial and positive manner in the appropriate Program Committee within the department.
- Supervise and advise Graduate Students in a manner that best assists and supports Graduate Students to build their skills and interests in regards to their future career goals.

5.19 Office of the Vice President for Research

General listing of Policies: <http://www.wmich.edu/research/policies>

Conflict of Interest Policy for Research Investigators:
<http://www.wmich.edu/research/policies/conflict-interest>

Research Ethics Resources: <http://www.wmich.edu/research/compliance/ethicsresources>

Intellectual Property Management and Commercialization:
<http://www.wmich.edu/research/intellectual>

5.20 Sexual Harassment

If you believe that you have been sexually harassed, report it, in confidence, to the Office of Institutional Equity. The telephone number is 387-6316. The university takes seriously report of sexual harassment. Here is their mission statement:

The Office of Institutional Equity promotes an environment of equal opportunity, equity, access, and excellence for all members of the University community, and provides compliance oversight regarding applicable laws, regulations, and policies to ensure a welcoming, safe, civil, and inclusive environment.

5.21 Ombudsman Office

If you have a conflict with a faculty or staff member, please contact:

Kathy Mitchell, Ombudsman
Eric McConnell, Assistant to the Ombudsman
(269) 387-0718, 2420 Faunce Student Services

A university ombudsman's role is to provide confidential advice and nonpartisan assistance in solving problems and resolving disputes. An ombudsman is independent of the university's formal administrative structure and cannot impose solutions, but can identify options and strategies for resolution. The four guiding principles of an ombudsman are confidentiality, independence, neutrality and informality.

5.22 WMU Human Resources

Information on a Tobacco-free campus, Nepotism, Whistleblower policy, and other topics:

<http://www.wmich.edu/hr/manual-discipline>

5.23 Additional Information for Graduate Students

University graduate program forms <http://www.wmich.edu/grad/forms>

WMU Graduate College

<http://www.wmich.edu/grad/>

Graduate Student Association

www.wmich.edu/gsac/

WMU Library

www.wmich.edu/library

Collective Bargaining Agreement
for the Teaching Assistants Union (TAU)

WMU Writing Center

<http://www.wmich.edu/writingcenter>

Academic Success Programs
(mostly for Undergraduate Students, but
some programs apply to Graduate Students)

<http://www.wmich.edu/academicsuccess>

6 PROGRAM CONTACT

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7 APPENDICIES

7.1 Thesis/Project/Dissertation Documentation Form

**Western Michigan University
Department of Civil and Construction Engineering
Thesis/Project/Dissertation Documentation**

To be Completed by Student

Student's Name: _____ WIN: _____

Graduate Program (select one): MS Thesis MS Project Ph.D. Dissertation

Starting Semester/Year: _____ Graduation Semester/Year: _____

Title of Thesis/Project/Dissertation:

Faculty Advisor: _____

Have you published journal or conference paper(s) as a result of this work? Yes No

If yes, please list the publications and identify if journal or conference paper:

To be Completed by Faculty Advisor

Did the student use modern engineering tools in their project/thesis/dissertation? Yes No

Is the thesis/project/dissertation topic related with an externally funded project? Yes No

If yes, provide the title of project and the name of the funding agency below.

Project Title: _____

Funding Agency: _____

Please submit this form to the department's front desk

7.2 Laboratory Safety Policy

CCE General Laboratory Safety Guidelines

- Stop working and immediately report any recognized potentially unsafe condition or act to your instructor.
- Never work alone in the lab.
- Do not eat or drink in the lab.
- Possession of unauthorized firearms, alcoholic beverages, or illegal drugs will not be tolerated.
- Before beginning work, notify your instructor of any permanent or temporary impairment that may reduce your ability to perform in a safe manner.
- Never use power tools or any power equipment without securing instructor's permission first.
- Store all tools and equipment in their designated areas.
- When lifting heavy objects, have someone help you and lift with your arms and leg muscles to avoid back injuries.
- Report any smoke, fire, spills, or unusual odors to your instructor.
- Do not deviate from written protocols or perform new procedures until you discuss it with your instructor.
- Do not remove any equipment or chemicals from the lab.
- Keep laboratory floor dry and clear of all objects. Water or oil should be wiped up immediately if spills.
- Never leave a machine running when not in use.
- Report any tool or machine that is out of order to the instructor immediately.
- Horseplay such as playing and running around will not be permitted.
- If you have any questions regarding the chemicals that you are using in lab, please talk to your instructor. In addition, you can search the WMU database for a safety data sheet using this link: <http://www.esem.wmich.edu/msds.htm>.

Safety Precautions and Guidelines for Survey Labs (CCE 2360)

- Use offset lines – this involves not taking a measurement or “shot” directly in the location of an object of interest if it is not in a safe location. Think of a utility manhole that is to be placed in an existing roadway. A surveyor may use an offset stake (or several stakes) to locate the manhole for the construction crew outside of the roadway such that the staking is preserved and is easily verifiable without putting interfering with dangerous traffic.
- Wear safety vests of fluorescent yellow color.
- Use flagging materials – flagging is used by surveyors to identify items of interest so they can be easily located again and/or to identify locations of work/no-work to avoid dangerous conditions within the work area.
- Install warning signs ahead of the jobsite – on many survey projects, especially those that involve roadway work, warning signs are used to alert drivers to the presence of the surveyors.
- Drink plenty of water and wear wide-brimmed hats and/or sunscreen.
- Wear protective boots and clothing, and use insect sprays as necessary. Be ready for inclement weather, cold temperatures, and the rough field conditions of some sites.
- Handle tools with care – some survey tools are sharp, pointed or otherwise hazardous with regards to the potential to damage skin and clothing. Other equipment may involve lasers that should not be directly focused near the eye, and some is heavy and awkward to carry thru rough terrain.

7.3 Form for Biannual Review for Possible TA or RA Funding Support

Biannual Graduate Student Review – TA and RA Funding Support

Required for all graduate students receiving support as TA/RA/DA this semester Department of Civil and Construction Engineering (CCE)
Due: _____ (hardcopy only) to: CCE Front Desk

Student's Name: _____

Faculty Supervisor Completing Review: _____

Faculty Signature : _____

Course(s) where student was TA: _____ OR Student was (circle one): RA DA hourly
☐ ☐ ☐

Please provide comments below, or state as "Non-applicable" (N/A)

- | | | | |
|---|---------------------------|--------------------------|---------------------------|
| 1. Did the student show-up prepared and on-time? | Yes <input type="radio"/> | No <input type="radio"/> | N/A <input type="radio"/> |
| 2. Did the student check-in on a regular basis? | Yes <input type="radio"/> | No <input type="radio"/> | N/A <input type="radio"/> |
| 3. Did the student respond to requests of the instructor /research supervisor in a timely manner? | Yes <input type="radio"/> | No <input type="radio"/> | N/A <input type="radio"/> |
| 4. Did the student post and hold regular office hours? | Yes <input type="radio"/> | No <input type="radio"/> | N/A <input type="radio"/> |
| 5. Was the student helpful and sympathetic to the student needs? | Yes <input type="radio"/> | No <input type="radio"/> | N/A <input type="radio"/> |
| 6. Was the student an effective communicator for your class purposes? | Yes <input type="radio"/> | No <input type="radio"/> | N/A <input type="radio"/> |
| 7. Did the student maintain the lab to your satisfaction? | Yes <input type="radio"/> | No <input type="radio"/> | N/A <input type="radio"/> |
| 8. Did the student enforce safety awareness? | Yes <input type="radio"/> | No <input type="radio"/> | N/A <input type="radio"/> |
| 9. May the student be considered to receive funding from Fund 11 next semester? | Yes <input type="radio"/> | No <input type="radio"/> | N/A <input type="radio"/> |

10. Rank the student's work ethic (pick one):

☐ 1 = Unacceptable ☐ 2 = Slightly Acceptable ☐ 3 = Neutral ☐ 4 = Acceptable ☐ 5 = Perfectly Acceptable

11. How much supervision did this student require per week (pick one):

☐ Less than 2 hours ☐ 3 to 5 hours ☐ More than 5 hours ☐ Way too much

12. Other comments:

Criteria for awarding future TA/GA/RA funding (in order of ranking importance):

1. Availability of funds
2. Departmental needs
3. Graduate Student Review Report and Progress to Degree
4. Background and expertise specified by the faculty in-charge of the course.
5. GPA or GRE scores (applies to new students only)
6. Seniority in the CCE Graduate Program

7.4 Form for Annual Review of CCE Ph.D. Graduate Students

CCE PhD CANDIDATE ANNUAL REVIEW				Date submitted:	
Faculty Advisor:		For Academic Year		Current GPA	[Type gpa here]
Your annual review is due to your Faculty Advisors on or before October 1st of each year. An Academic Year is from July 1 to June 30					
Student Name(s):					
Student WIN Number:					
Classes/Grades taken last A/Y:	[Type classes and grades for courses taken last fall/spring/summer]				
Classes to be taken this A/Y	[Type classes you plan to take this fall/spring/summer]				
Non-Juried Presentations (presentations accepted without review)	[Type Non-Juried Presentations Here]				
Juried Presentations (presentations accepted after review).	[Type Juried Presentations here]				
Non-Juried Posters (posters accepted without review)	[Type Non-Juried Posters here]				
Juried Posters (posters accepted after review)	[Type Juried Presentations here]				
Non-Refereed Conference Publications (paper accepted without review)	[Type Juried Presentations here]				
Refereed Conference Publications (paper accepted after review)	[Type Juried Presentations here]				
Non-Refereed Journal Publications (paper accepted without review)	[Type Juried Presentations here]				
Refereed Journal Publications (paper accepted after review)	[Type Juried Presentations here]				
Other activities (teaching and/or progress on Dissertation):					
Comments	[Type Comments]				
First Enrolled in PhD:	QE Exam Taken or Scheduled	Term	7300 Taken or Scheduled	Term	Anticipated Graduation Semester:
Check Completed Items Only	<input type="checkbox"/> Research Tools	<input type="checkbox"/> Committee Appointment form Filed	<input type="checkbox"/> Program of Study Submitted		
FACULTY ADVISOR TO COMPLETE THIS SECTION Faculty Advisor to review with the student and submit completed form to Department Office by February 15:					
Faculty Advisor:		For Academic Year			
Select One:	<input type="checkbox"/> Continuation	<input type="checkbox"/> Continuation with Conditions	<input type="checkbox"/> Dismissal		
Comments or Conditions					
Faculty Advisor signature					Date
CCE GRADUATE COMMITTEE					
Graduate Committee Chair or Member				Date of Graduate Committee Review	