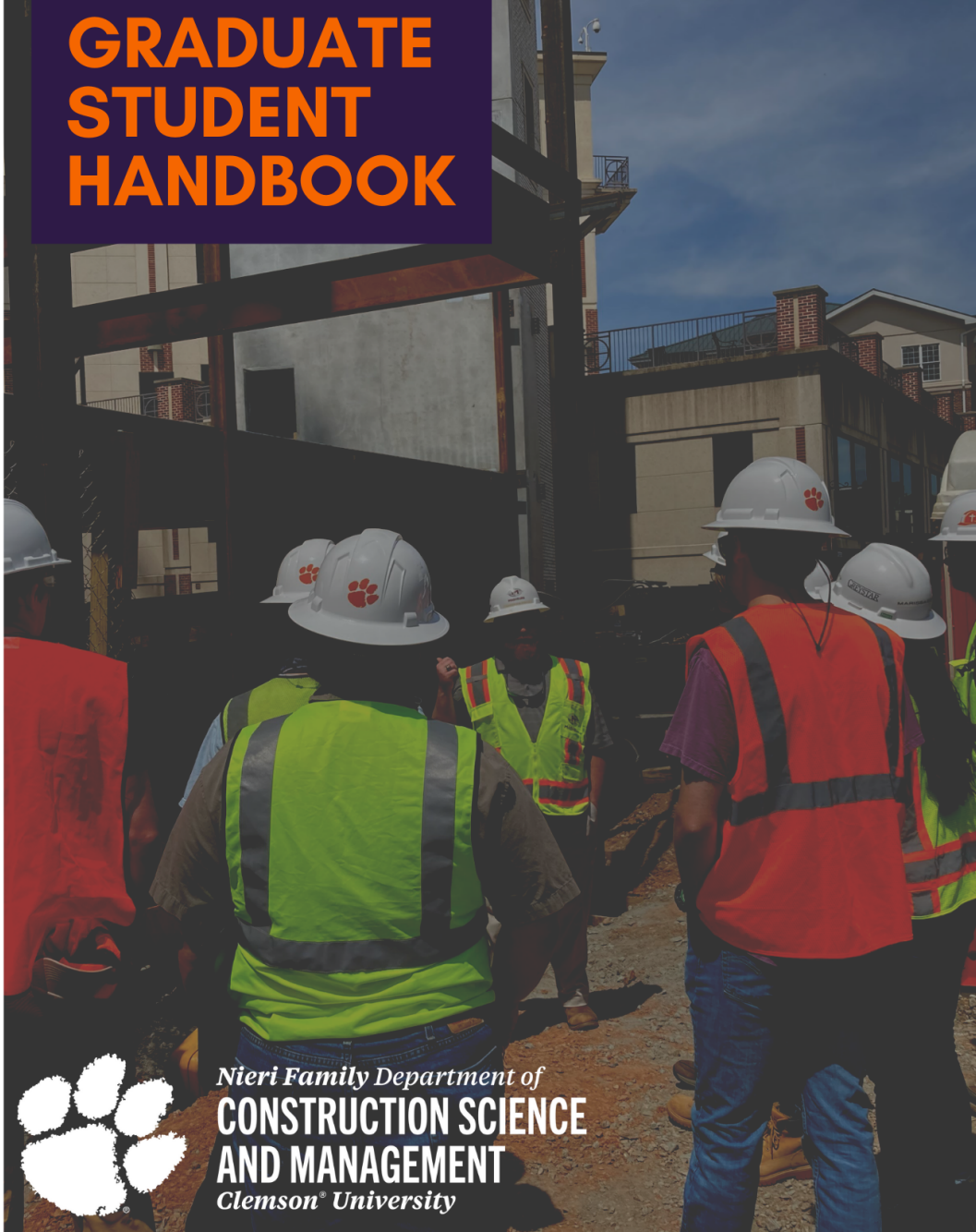


GRADUATE STUDENT HANDBOOK



Nieri Family Department of
**CONSTRUCTION SCIENCE
AND MANAGEMENT**
Clemson® University

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INTRODUCTION

Welcome/Purpose of this Handbook	1
Contact Information	1
Mission and Goals and Overview of Graduate Program	1
Master Degree Program	2

ENTERING THE PROGRAM

Admission Requirements for Master's Degree	3
University Acceptance Categories	4
Prerequisites	5
English Language Proficiency	5
Computer Proficiency	5
Foreign Language Requirement	5
Transfer Credits	6
South Carolina Residency	6
University Employee Enrollment	7
International Students	7
Student Expenses	7
Student Visa	7
Social Security Number	7
Costs	8
Financial Assistance	8
Employment Paperwork	9
CU Student ID, Username and Tiger 1 Card	9
CUID	9
Username	9
Tiger 1 Card	9
Registration	10
Housing, Area Information	10
Housing	10
CAT Bus	10
Groceries, Service, Shopping	11
Orientation	11

GETTING THROUGH THE PROGRAM

Student Responsibilities	11
Academic Integrity	12
Academic Integrity.....	12
Academic Research	14

Requirements for the Master’s Degree	15
Thesis Program Option	15
Non-Thesis Program Option	15
Courses Outside Discipline	15
Time Requirement	15
Waiver of Requirements	15
Academic Requirements	16
Maintaining Academic Standing	16
Maximum Enrollment	16
Honors and Awards	17
Incomplete Coursework	17
Enrollment on Pass/Fail Basis	17
Auditing Courses	17
Withdrawing From Courses	18
Repeating a Course	18
Continuous Enrollment, Leave of Absence	18
Withdrawing from the Program/University	18
Advisory Committee	18
Major Advisor	19
Advisory Committee	19
Plan of Study (GS2)	19
Assistantships/Financial Support	21
Graduate Assistantships	21
Graduate Assistantship Responsibilities	21
Fellowships	23
Employment-Related Information	23
Outside Employment	25
Processes and Procedures	25
Schedule of Courses	25
Department and Graduate School Forms	25
Checklist/Worksheet of Requirements	26
Directed Studies	27
Guidelines for Faculty	28
Professional Development	28
Career Planning	28
Professional and Student Organizations	29
Student Government	29
Professional Certification Requirements	29
Administrative Policies and Procedures	29
Accessibility Statement	29
Disability Access Statement	30
Harassment	20
Amorous Relationships	32
Drugs, Alcohol, Smoking	32
Computer Use	32
Email Access and Use	33

Mailboxes	33
Intra-Departmental Communications	33
Copy Machine Use	33
Telephone Use, Long Distance Charges	33
Office Supplies	33
Ordering Supplies and Equipment	34
Student Offices/Desks	34
Faculty Offices	34
Dress Code	34
Student Travel	34
Inclement Weather	34
CSM Department Student Advisory Committee	35
Political and Religious Activities	35
Campus Facilities and Resources	35
Emergencies	35
Graduate School Government	35
R.M. Cooper Library	35
Copy Services	36
University Union, Hendrix Student Center, and Brooks Center	36
University Bookstore	36
University Health System	37
Fike Recreation Center	37
Sporting Events	37
Campus Parking	37

NEARING GRADUATION

Thesis

General Guidelines	38
Planning	38
Prior Student Theses	38
Proposal Presentation, Format, Contents	38
Writing the Thesis	39
Review and Approval	39
Formatting Guidelines and Electronic Submission	40
Patent, Copyright/Publishing Information	40
Application for Diploma	40

APPENDICES

Appendix A – CSM Graduate Course Descriptions	42
Appendix B – Faculty Listing	45
Appendix C – Support Services	46

Grievance Policy and Ombudsman Information46
Counseling Services48

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INTRODUCTION

Welcome/Purpose of this Handbook

Welcome to the Nieri Family Department of Construction Science and Management (NFCSM) at Clemson University. We wish you success at every stage of your academic journey.

This handbook is intended to familiarize you, as a graduate student in the Nieri Family Department of Construction Science and Management, with the requirements, policies and procedures involved throughout your graduate experience. The rules and regulations provided in this handbook govern our academic programs and describe the duties and responsibilities of graduate students in the department. These rules and regulations, developed through the years and in conjunction with the Graduate School, have proven to be beneficial for both students and faculty in the department. In addition, this handbook provides useful information and resources to ease and enhance your experience in the program. Each student is expected to be familiar with the contents of this handbook.

These rules and requirements are in addition to and subordinate to those described in the *Graduate School Announcements*, which you can find at http://www.registrar.clemson.edu/publicat/catalog/2016_GC/2016_GC.html or through the Graduate School office in E-108 Martin Hall. Any inconsistencies within this handbook or between this handbook and the *Graduate School Announcements* should be brought to the attention of the CSM Graduate Program Coordinator.

Contact Information

Graduate Program Coordinator: Dr. Shima Clarke; 2-131 Lee Hall;

Phone: 864-656-4498; E-Mail: shimac@clemson.edu

The Graduate Program Coordinator promotes the program, orchestrates recruiting activities and makes recommendations regarding graduate admissions offers. The program coordinator also oversees the regulations and procedures of the program, coordinates curriculum updates and interacts with the Graduate School on matters such as student status, assistantships and fellowships. The program coordinator is your first contact should any issue arise regarding your academic progress or the program curriculum.

Department Admin Assistant: Ms. Deborah Anthony; 2-122 Lee Hall;

Phone: 864-656-0181; E-Mail: adebora@clemson.edu

For a complete listing of faculty, see Appendix B.

Mission and Goals and Overview of Graduate Programs

The Mission of the Nieri Family Department of Construction Science and Management is to offer a comprehensive program of education with scholarly and service activities consistent with the Mission of Clemson University and the College of Architecture, Arts

and Humanities, to improve the quality of the construction industry and thus the built environment.

To realize the mission, the department has the following major goals as it relates to its graduate master's degree program:

1. Excel in the education of Construction Science and Management graduate students through a vigorous program of academic learning designed to produce motivated, well-educated, and responsible citizens with the management and technical skills requisite for advanced leadership positions in the construction industry.
2. Foster Clemson University's service mission by providing outreach activities for the construction industry and public both nationally and internationally.
3. Assist in attaining Clemson University's funded research goal by conducting and disseminating the results of research and development, and/or conducting educational courses for the construction industry.

Master Degree Program

The Master of Construction Science and Management has been officially designated as a Science, Technology, Engineering and Mathematics (STEM) program.

Many students pursue the MCSM degree at Clemson for a variety of reasons:

- Self-fulfillment
- Greater expertise in the construction industry
- Preparation to teach at a technical college or university
- Advancement within their company
- Earn an advanced construction degree to compliment a non-construction-related undergraduate degree
- Flexible curriculum
- Thesis or non-thesis option
- Distance-learning (online) option
- Clemson University's reputation
- Strong relationship with the construction industry
- Excellent assistantship opportunities
- Excellent job opportunities and placement

Courses in the program are taught live on the Clemson University campus, online, and via distance learning technology. Clemson's program is totally online and one of the first distance-learning construction master's degree program in the United States.

ENTERING THE PROGRAM

Admission Requirements for Master's Degree Program

Requirements to be considered for admission into the master's degree program in the Neri Family Department of Construction Science and Management (N_FCSM) generally follow those of the Graduate School (see the *Graduate School Announcements* at http://www.registrar.clemson.edu/publicat/catalog/2016_GC/2016_GC.html).

A bachelor's degree in construction science, construction management, building construction or a related area is required. Applicants from other disciplines may be admitted, but they may be required to make up any deficiencies in course work to provide the needed prerequisite skills and knowledge for the M_CSM graduate program.

Acceptance must be granted by the Graduate School and the Department of Construction Science and Management. Graduate school acceptance is based on meeting all applicable Clemson University requirements.

The minimum admission requirements for CSM Master Degree Program are:

- GPA of 3.0 from undergraduate degree
- GRE
- TOEFL/IELTS (for foreign students)
- One year of approved construction experience is preferred
- Three letters of recommendation in the Graduate School Format
- Official transcripts from undergraduate and/or graduate schools
- A detailed resume of construction experience

Admission to graduate studies in construction science and management begins with your submission of an official application to the Clemson University Graduate School via their website at <http://www.clemson.edu/graduate/admissions/index.html>. Upon receipt of all admission materials, the Graduate School will forward your application to the N_FCSM Department and the Program Coordinator for review. Applicants must meet all admission requirements of the Graduate School and N_FCSM Department before official acceptance will be granted.

Admission to the Master Degree Program in Construction Science and Management (CSM) is restricted to applicants whose academic record indicates a high potential to be successful in graduate studies. This determination is made by the graduate program coordinator in consultation with the graduate faculty of the N_FCSM Master Degree Program based on a comprehensive review of all of the applicant's previous educational and experiential qualifications and is affirmed by the Graduate School.

University Acceptance Categories

Students are accepted into the program as either full or conditional status. Each indicates a different level of performance on the admission criteria.

Full Status: Your credentials equal or exceed every minimum admission criterion prescribed for the applied-for degree.

Conditional Status: At least one piece of required application materials has not been received by the Graduate School. Notice of conditional acceptance may be given prior to receipt of a missing item, but any and all missing materials must be received prior to or during your first semester of enrollment. Upon receipt, you may be admitted to either full or provisional status. Conditional status may also be granted to highly qualified applicants prior to receipt of the degree they are currently pursuing; however, all requirements for that degree must be completed prior to enrolling in the proposed graduate program at Clemson.

Prerequisites

If an applicant does not have an acceptable construction-related undergraduate degree, he or she may need to take one or more of the following undergraduate courses in the N/CSM Department or approved equivalent ones at another approved college or university and/or demonstrate that they have acquired the needed skills and knowledge associated with the courses through experience and/or challenging out of the courses:

- CSM 2030 and CSM 2050 - Materials and Methods I and II: Descriptive study of the materials and methods of construction focusing on nomenclature, building materials and assembly of building systems consisting of wood, masonry, foundations, interior and exterior finishes, steel, concrete and roof assemblies.
- CSM 2040 - Contract Documents: Working drawings, specifications and the various contracts required to carry out a construction project.
- CSM 3510 and CSM 3530 – Construction Estimating I and II: Quantity take-off of materials, assigning labor and equipment production rates, pricing and wage rates.
- CSM 3520 – Construction Scheduling: Planning and scheduling concepts as they relate to a construction project such as the critical path method, resource loading and cost analysis.
- CSM 4530 – Construction Project Management: Study of construction business organizations, methods of project delivery, field organization, policy, ethics, project management, labor relations and productivity

If course deficiencies are specified as a condition of your admission, it is important that you take the necessary courses early in your program in order to provide you with

background for graduate-level courses. Normally, you remove these deficiencies by taking and passing the required courses during a regularly scheduled course offering. These courses do not count toward the total number of semester hours of graduate credit required for successful completion of either program.

English Language Proficiency

International students whose native language is not English are required to submit a satisfactory score on the Test of English as a Foreign Language (TOEFL) or to have completed approved English as a Second Language (ESL) course work from one of Clemson's ESL affiliates. International students who are applying for a graduate assistantship are encouraged to submit scores from the Test of Written English (TWE), which is administered simultaneously with the TOEFL at most locations.

If you are a non-native English speaker and the Graduate Program Coordinator feels you should improve your English skills, you must complete English 1110: English as a Second Language or an approved course from one of Clemson's ESL affiliates.

A graduate student whose native language is not English is required by South Carolina state law to pass an English speaking exam (the SPEAK test) before you can be certified to teach as a laboratory teaching assistant. The Clemson English department administers the exam, which is similar in form to the Test of Spoken English administered by ETS. The exam is offered at the start of each semester and once in the summer, and students may take the exam anytime that it is offered. It is expected that you will pass this exam sometime during your first year of study. If you do not pass the exam by the end of the first year of study, you may be asked to leave the program.

When you do pass the English speaking exam, you will be eligible to serve as a teaching assistant. You would then receive the same stipend as all other students who are teaching assistants.

Computer Proficiency

The N/C/SM Department has no formal requirements for computer literacy or competency. However, each graduate student is expected to be proficient in the use of digital computers. It is highly recommended that all graduate students have a laptop computer meeting the same computer specifications required of undergraduate students in the construction science and management program. These can be found on the Clemson University CCIT Website. Use of computers and competency in various software programs will be necessary in many graduate courses and it is expected that you will acquire whatever skills are needed to use these resources as they are required. Workshops provided by Clemson Computing and Information Technology (CCIT) are periodically made available to help students who need help to gain this competency.

Foreign Language Requirement

The N/C/SM Department does not have a foreign language requirement.”

Transfer Credits

University policy does not allow automatic transfer of graduate credit. Students with graduate credit earned at another institution, in another department at Clemson University, or earned before admission to this program must have prior work evaluated for transfer credit. Requests for transfer credit to the program must be approved by the program coordinator, the department chair and the dean of the Graduate School. You must make your request in writing for each course or credited activity to be transferred. Each request must be accompanied by an official transcript, catalog description and syllabus or other supporting documentation. Grades earned for courses taken at institutions other than Clemson University will not be included in the student's academic average. All transfer credits must be verified by an official transcript from the institution at which the work was completed. It is your responsibility to request a transcript of transfer credits be sent directly to the Graduate School.

In any case, the number of credit hours that may be transferred from an accredited institution into the CSM Master Degree program is 9. No more than 9 semester credit hours earned in a non-degree status at Clemson University can be applied to a degree program.

Transfer credit will not be awarded for research, internships, courses graded pass/fail, or course work in which you received a grade lower than a B or its equivalent. No credit will be given for continuing education units, correspondence, extension or in-service courses or for concentrated courses and workshops that award credits at a rate exceeding one credit per week. Course work completed outside the six-year time limit may not be transferred to Clemson University or validated for graduate credit. See the *Graduate School Announcements* for more information regarding transfer credits (www.registrar.clemson.edu/html/catalogGrad.htm).

South Carolina Residency

Many students are interested in establishing residency in South Carolina for the purpose of paying in-state tuition. The South Carolina residency laws call for you to establish legal ties with the state; you must generally wait one year before establishing legal ties. Thus, you should take steps near the beginning of your program to initiate the process of becoming a South Carolina resident.

The legislation defining residency sets forth a fairly strict set of criteria for the administrative approval of residency requests. The Office of Residency Classification handles all the information regarding domicile requirements for residency status. Due to the frequency of changes implemented by the state legislature in past years, those criteria are not elaborated here. If you are interested in establishing South Carolina residency, review the up-to-date information at <https://www.clemson.edu/financial-aid/residency/>. Questions should be addressed to the Office of Residency Classification (G-01 Sikes Hall, (864) 656-2280).

University Employee Enrollment

With the approval of the appropriate dean or director, a qualified employee of Clemson University may pursue graduate work for credit. However, no member of the faculty or staff who has a rank higher than instructor or its equivalent may be considered as a candidate for an advanced degree in the academic department where you are employed. Payment of the application fee is required.

Limitations on the number of hours taken per semester are explained under later in this handbook. You must make up any time spent in class during normal working hours under a schedule acceptable to your employment supervisor. Flexibility will be given to accommodate class schedules, but you must work out conflicts with your supervisor. You must complete your graduate study within six years of commencing the program.

International Students

Student Expenses

International students must certify access to a minimum of one year's estimated expenses. See http://media.clemson.edu/ia/services/IS50_Financial_Certification.pdf for more details or contact the International Affairs Office (E-303 Martin Hall, (864) 656-3614).

Student Visa

You are responsible for maintaining legal status with the US Department of Homeland Security during your studies. Form DS-2019 (J-1 exchange visitor visa certificate) is usually issued to students who are funded by their home government or by an international organization. If no organizational sponsor is involved, an I-20 (F-1 student visa certificate) will be issued.

When your application to the Graduate School has been accepted and your language and financial abilities are certified, Campus Immigration Services will issue you an I-20 or DS-2019. Take this document to the nearest US Consulate to apply for a nonimmigrant student visa.

For more information and details about applying for your visa, see the Campus International Services website at <https://www.clemson.edu/campus-life/campus-services/international/contact-us.html> or contact them at (864) 656-3614.

Social Security Number

If you are an international student receiving an assistantship, you must have your offer letter with you upon arrival. You should then go to the Social Security Administration in Anderson, S.C., for a Social Security Number or meet with the Social Security Administration representative in Martin Hall on the dates indicated by the Graduate School. You should then see the NCSM Department's Administrative Assistant who will

provide you with the paperwork that you must take with your signed Social Security card to the Foreign National Payments Coordinator in E-303 Martin who will complete the necessary paperwork to assist you with getting on the payroll. Be sure to bring the following:

- U.S. Visa
- Unexpired foreign passport
- I94
- IAP-66/I-20

You *must* call for an appointment before going to the Foreign National Payments Coordinator's office. The telephone number is (864) 656-5589.

Costs

For tuition and fees, see www.grad.clemson.edu/Financial.php.

Graduate assistants in the master degree program may choose to defer tuition and fees. This is accomplished easily on the day of registration. Persons in the fee assessment area will have a list of all graduate assistants. Anyone listed may sign a note to defer these costs and these costs will be deducted from the first six full paychecks of the semester.

For more information about academic costs, financial aid and making payments, contact the Office of Student Financial Aid (G-01 Sikes Hall, (864) 656-2280) or the Bursar's Office (G-08 Sikes Hall, (864) 656-5592).

Financial Assistance

To be considered for financial assistance through the award of a master degree program graduate assistantship beginning in the fall semester, you should submit your application no later than March 1 for fall admission and October 1 for spring semester admission. Most of the graduate assistantships are awarded for fall admission. Applications received after those dates may be considered for financial assistance depending on the availability of funds.

Assistantships are awarded on a competitive basis to qualified students, both domestic and international. All qualified students are considered for assistantships when applications are processed. Award decisions are based on academic record, test scores, statement of purpose, and letters of recommendation.

Financial support is awarded based on availability of funds in the area of desired study and academic merit. If you change your subject area after support has been extended, support eligibility is reviewed and funding may or may not be provided.

Graduate students are eligible for financial support if they are (1) enrolled in full-time graduate studies, (2) in good academic standing (i.e., not on probation), and (3) making satisfactory progress toward their degree. Tuition and fees for students receiving

support are a reduced flat fee. To receive the reduced tuition and fees for a particular semester, a qualified student must be on the department payroll by end of the second week of that semester.

Employment Paperwork

If you have been awarded an assistantship, you must report to the departmental staff at the beginning of your assistantship and complete the following forms: information sheet, tax forms (federal and state), and I-9 Form. You will need to provide proof of nationality, Social Security number, age, etc. (usually by way of a passport, driver's license, birth certificate or Social Security card).

CU Student ID, Username and Tiger 1 Card

CUID

When you are accepted into the Graduate School, you will be issued a unique student identification number as part of your admissions acceptance packet. Your student ID is a 9-digit number you will use on forms and other official University business. It is often referred to as your "CUID".

Username

Also upon acceptance, you will be assigned a Clemson University computer user identification. This is a permanent, unique-to-you identifier that you will use every time you access the Clemson computer network. You may see or hear it referred to as your "username" or "USERID". Your username is a 4-8 character identification that generally consists of some part of your first and/or last name and designates your official Clemson University email address (for example, Jones2@clemson.edu, where "Jones2" is the username). Your username gives you access to University systems such as Webmail, MyCLE/Blackboard, the Student Information System (SISWeb)/iROAR and the online Web Registration. You may also need to use your student username to access department-specific networks and files.

Tiger 1 Card

Soon after you arrive, you will want to obtain your Tiger 1 Card. This is your official Clemson University photo ID card and gives you access to a variety of services throughout campus and around town, including:

- Library card
- Fike Recreation Center access card
- Athletic ticket privilege access
- Purchase discounted software through CCIT

- Personal debit card to access pre-deposited funds in a TigerStripe account (see tiger1.clemson.edu/content/tigerstripe_what.php for more information).

You must be registered for at least one class during the current semester to qualify for a Tiger 1 Card. Bring a photo ID (driver's license, state-issued ID card or passport) to the Tiger 1 Card office located in the lobby of Fike Recreation Center. There is no charge for your first ID card. Always remember to carry your Tiger 1 Card with you at all times.

Registration

Prior to registering for courses for your first semester of study, you must report to the program coordinator. He/she will help you plan your initial program of study. Registration is conducted entirely online via iROAR. The Office of Registration Services provides a wealth of information that you may refer to regarding the steps to be taken in the registration process, including a demo of the online system at tigerwebdemo.clemson.edu/. See the Registration Services website at www.registrar.clemson.edu/portal/. If you have any further questions, please contact the Program Coordinator. Any student pursuing any phase of a graduate program must be registered.

Housing, Area Information

Housing

New graduate students are housed on campus as space permits, after all continuing student and freshman assignments are completed. The University has a small community of two-person apartments in Thornhill Village for single (unmarried) graduate students. In addition, single graduate students may request to live in other areas on campus, as space permits. Graduate students should call the Housing Office at (864) 656-2295.

The Clemson area offers students a host of off-campus housing choices in a wide range of prices. Consult a local realtor for options or more information. Some apartments do not include utilities (electric, water, phone, cable) as part of your lease agreement. You may need to make arrangements to have services connected by contacting the utility companies directly; your property manager/landlord should be able to provide you with the appropriate contact information.

CAT Bus

The Clemson Area Transit Service, known as the CAT Bus, is a free bus service provided by the City of Clemson. It offers fare-free shuttles around campus and around the Upstate, including service to Anderson, Central and Seneca. For route information, visit their website at www.catbus.com.

Groceries, Services, Shopping

The Clemson area offers a variety of shopping opportunities. There are several grocery stores, banks, commercial laundries and drug stores within just a few miles of campus, many of which are accessible by foot, bicycle or CAT Bus. A wide range of restaurants are also available downtown and along Tiger Boulevard. The greater Upstate area, including Central, Seneca, Easley and Anderson, provides even more products and services along CAT Bus routes or for those students with private transportation. Contact the Clemson Chamber of Commerce for more information (www.clemsonchamber.org).

Orientation

All full-time graduate students are required to attend the Graduate School orientation(s) before classes start in the fall. The N₇CSM Department also conducts an orientation at the start of each fall semester which you must attend. The date, time and location of the orientations will be provided to you shortly after you receive your admissions acceptance packet.

GETTING THROUGH THE PROGRAM

Student Responsibilities

The N₇CSM Department expects you to approach your graduate study in a professional manner and adhere to the following guidelines. All graduate students must maintain a minimum cumulative grade point average of 3.0 out of a possible 4.0. If currently enrolled students fall below the minimum cumulative 3.0 grade point average for any one semester, they will be placed on probation for one semester. It is the student's responsibility to remove the probationary status in the time frame outlined in University and/or N₇CSM Department communications.

If a student does not fulfill the conditions of continuance in the program, the student must present a formal request to the program coordinator as to why he/she should be allowed to continue enrollment. The request will be reviewed and a decision will be made based on the student's academic history in the department. The decision will be final with no further appeal possible. In addition, if the student's request is granted, it will be for only one additional semester.

In fulfilling their academic requirements, graduate students are expected to adhere to all department and faculty course requirements, including those contained in the N₇CSM Department Expected Student Behaviors, which is made available to all students at the beginning of each semester with their course syllabus. Students who fail to follow requirements may be dropped from courses and the respective graduate program.

It is also critical that students follow acceptable standards in developing or presenting research reports for courses and projects. This includes properly citing references and including bibliographies, formatting documents correctly and utilizing correct English

grammar and spelling. Resources for properly citing references and formatting documents include the American Psychological Association, Associated Schools of Construction Author Guidelines and the American Institute of Constructors Author Guidelines.

The department requires each student to sign a “Departmental Expectations for Graduate Work” form. The purpose of this Form is to help avoid misunderstandings between you and the program coordinator concerning expectations for completing your degree. This Form will be made available to you to sign early in your first semester in the respective graduate program.

Academic Integrity

A university is a community of scholars dedicated to the inquiry into knowledge. It follows as a basic tenet that students will conduct themselves with integrity in academic pursuits. In instances where the academic standards may have been compromised, Clemson University has a responsibility to protect this process and to respond appropriately and expeditiously to charges of academic misconduct.

Academic Integrity

A summary of the Graduate School’s policy on academic integrity follows. For a complete text of the policy, including rules and procedures, and specifics related to former students, academic research and revocation of academic degrees, see the “Appeals and Grievances” section of the Graduate School website at www.grad.clemson.edu/policies/Appeals.php#misconduct and the *Graduate School Announcements* at www.registrar.clemson.edu/html/catalogGrad.htm.

I. Definitions, explanations and examples of violations of academic integrity

- A. Cheating. Cheating involves giving, receiving or using unauthorized aid on any academic work submitted for grading including coursework, laboratory assignments, research projects, comprehensive and qualifying examinations, theses and dissertations or using computer center account numbers that belong to another person without the permission of the account owner. Unauthorized aid includes collaborating with classmates or others when explicitly prohibited, using online paper mills or paying individuals to prepare research papers, reports or projects, submitting identical work to satisfy the requirements of more than one class without the approval of the faculty, or using textbooks, notes, the web and other sources when instructed to work alone.
- B. Fabricating/falsifying information. Fabricating or falsifying information involves actions such as making up data that were not collected, stating that studies were conducted that were not, indicating that original source material was read when information was obtained from secondary or tertiary sources, making up references not used or identifying sources that were not consulted.

- C. Facilitating violations of academic integrity. Facilitating violations of academic integrity involves students intentionally assisting others to violate the principles of academic integrity (for example, allowing friends access to their work, or instructing students on ways to solicit aid on papers, projects, take home exams, tests for state and national licenses, etc).
- D. Failing to cite contributors. Failing to cite an author or multiple authors involves not giving credit to individuals who have contributed significantly to a work (paper, research project, poster, etc.) and claiming the final product as one's own.
- E. Plagiarizing. Plagiarizing is theft of the work accomplished by someone else. It includes copying words, phrases, sentence structure, computer code or files, images, or ideas from any source and attributing the work to one's own efforts. Blatant examples of plagiarism include failure to use quotation marks, to indent text of more than three lines and failure to cite consulted sources either in footnotes, endnotes or within the body of the text of a document. More subtle examples of plagiarism include paraphrasing or using others' conceptual frameworks for developing creative works without acknowledgement or permission or citing a source within the text but then directly quoting the materials without the use of quotations marks or text indentation. For more information about and examples of plagiarism visit www.plagiarism.org/learning_center/what_is_plagiarism.html.
- F. Thwarting others' progress. Thwarting others' progress involves editing, deleting or otherwise destroying computer files that belong to another person or intentionally stealing or destroying property which prevents others from using it to gain needed information to complete assignments, for example, library materials on reserve, materials on loan by a faculty member or reports and documents made available for student use by external companies, state and federal agencies, etc.

II. Levels of seriousness of violation - At the graduate level, it is expected that students exhibit sophistication in understanding the tenets of academic integrity. Even so, it is clear that some types of violations are more serious in nature than others and that some types of violations require deliberate, calculated actions on the part of the student. The Graduate School's policy categorizes academic integrity violations into four levels, ranging from an unawareness or minor misunderstanding, to an intention to defraud or otherwise engage in criminal-type activity. Each level of violation carries one or more sanctions, from verbal reprimand to permanent dismissal from the University; repeated violations, irrespective of the level, may result in more severe sanctions as well.

III. Graduate Academic Integrity Committee - The authority to resolve cases of violations of academic integrity by enrolled graduate students is vested in the Graduate Academic Integrity Committee (GAIC). The GAIC consists of four tenured faculty members from

each of the five colleges, one graduate student from each college. An associate dean of the Graduate School serves as the non-voting administrative coordinator for the GAIC.

IV. Procedures - It is the responsibility of every member of the Clemson University community to enforce the academic integrity policy. Students and staff members should report violations of this policy to the faculty member for the affected course (including the research advisor or internship/practicum/co-op supervisor). When, in the opinion of anyone outside the University, there is evidence that a student has committed a violation of academic integrity, that person should bring the allegation to the attention of the associate dean of the Graduate School. The associate dean will contact the appropriate faculty representative of the student's program (consistent with the alleged violation).

When, in the opinion of the faculty member, a student has committed a violation of academic integrity, the faculty member will fully document the charge in writing in a statement delivered in a sealed envelope to the associate dean of the Graduate School. At the same time, at his or her discretion, the alleging faculty member is encouraged, but is not required, to privately inform the student charged of the nature of the allegation. Within three working days from the date the associate dean has received a formal charge of an alleged violation, he or she will provide the student with a copy of the charge and the procedures of the GAIC. Those procedures vary depending on the level of the violation and whether the student chooses to pursue a hearing. For more information about the procedures, refer to the *Graduate School Announcements* at www.registrar.clemson.edu/html/catalogGrad.htm.

Academic Research

The effectiveness of the research infrastructure throughout the world is based on the personal and professional integrity of the people involved. The central assumption to all research endeavors is that researchers have done what they say they have done. The M/CSM Department is part of that infrastructure and the research conducted here must withstand the highest scrutiny. Consequently, we must all ensure that our scholarly work is conducted and reported with the highest ethical standards. We must be careful in our recordkeeping and diligent in our efforts to always attribute credit where it belongs. In particular, we must guard against any activity that would bring the integrity of the department or the individuals within it into question.

Requirements for the Master's Degree in Construction Science and Management

The M/CSM degree requires a minimum of 30 semester hours of approved course work or thesis. This includes taking CSM 8520, CSM 8650, CSM 8600 or CSM 8660 or CSM 8680, and any two CSM graduate elective courses for a total of 15 credit hours. The balance would consist of department-approved electives for the non-thesis option or CSM 8910 for up to 9 credit hours of the balance.

Thesis Program Option

If selecting the thesis program option, the student must also satisfactorily complete a thesis on an approved construction-related topic. Up to nine (9) semester hours of thesis credit (CSM 8910) may be taken. In addition, the student must perform satisfactorily on a final oral examination relating to the student's thesis and program of study.

Non-Thesis Program Option

If selecting the non-thesis program option, the student must also satisfactorily perform on a written comprehensive examination covering the student's program of study is required. Satisfactory performance on a final oral examination relating to the student's program of study is required in cases in which the student does not pass the comprehensive written exam.

Courses Outside Discipline

It is expected that a student may choose non-CSM courses involve subject matter that are relevant to the CSM Master Degree program as part of his or her plan of study. All non-CSM courses must have the approval of the student's major advisor and program coordinator, if enrolled on the thesis option, or only the program coordinator if enrolled in the non-thesis option prior to enrolling in them.

Time Limit

A master degree candidate has up to six years to complete all program requirements for graduation.

Waiver of Requirements

The requirements for achieving a master's degree in construction science and management, as outlined in this handbook, are designed to provide a consistent minimum level of performance for all graduate students. At the same time, flexibility is provided to allow for the diverse areas of study and individual strengths of each student. Most of this flexibility is built into the existing requirements.

A course taken at another institution that is equivalent to one of the core courses may be exempted by your demonstration of competency and/or providing evidence of equivalency to the course instructor and program coordinator. A special examination may be offered to meet these requirements. Substitution of a structured core curriculum course requires the approval of the program coordinator.

Academic Requirements

Maintaining Academic Standing

A graduate student must adhere to the above mentioned academic performance requirements. The awarding of an advanced degree/certificate does not merely attest to completion of academic requirements in courses, seminars and research activities, but also to the acquisition of acceptable professional standards, including standards of ethics. Violations of professional standards may result in disciplinary action, including dismissal from the program.

Maximum Enrollment

The upper limits on graduate student enrollment per semester, as outlined in the table below, refer to graduate and undergraduate credits combined and should be attempted only by the most qualified students. Should the six-week and three-week sessions run concurrently, the total credits are not permitted to exceed the upper limit for the six-week session. Graduate students paid solely on an hourly basis are not classified as graduate assistants but are subject to the same limitation in credit loads.

Student Category	Maximum Credit Hours		
	Semester	6-Week Session	3-Week Session
Full-time Students	18	6	3
1/4-time Graduate Assistants	15	5	3
1/2-time Graduate Assistants	12	4	2
3/4-time Graduate Assistants	12	3	1
Persons employed full time	9	3	1

Quarter-time, half-time and three-quarter-time graduate assistants are defined as those who contribute an average of 10, 20 and 30 clock hours per week, respectively, of service to the University for the entire semester. A person employed full time is defined as anyone employed five full working days per week regardless of the employer(s). A graduate student who becomes employed full time while the assistantship is in force must notify the Graduate School and the department providing the assistantship.

Honors and Awards

The NCSM Department presents the Ralph Edward Knowland Outstanding Graduate Student Award each academic year to a graduating master degree student who has demonstrated the greatest contribution to the department based on a high level of performance and participation in the graduate program and department activities. The CSM Department faculty select the award recipient.

In addition, qualified master degree students are invited to join Sigma Lambda Chi, the construction education honor society. Selection is based solely on academic performance

Incomplete Coursework

A grade of Incomplete will be given only if you have not completed the course for some unavoidable reason that is acceptable to the instructor. Unless you complete the requirements for removal of the I grade within the time period stipulated by University policy, the Student Records Office will automatically change the I to an F. Extensions of the deadline for completing the course work are granted only in extreme circumstances. Students who have Incompletes cannot graduate, even if the incomplete courses are not part of your GS2 plan of study. Special courses that constitute multi-semester projects are exempt from this rule. Incomplete grades for those courses may be given until the project is complete.

Enrollment on a Pass/Fail Basis

The only CSM graduate course that is taken on a pass/fail basis is thesis research.

Auditing Courses

Permission for a student to audit a particular graduate course is at the discretion of the department chair, the program coordinator and/or the instructor. The principal factors involved in granting permission are that the auditor must possess the necessary academic background and space must be available.

Audited courses do not carry credit and the fact that a course has been audited is not noted on your official record. Graduate auditors are not required to take examinations. However, the instructor, at his/her own discretion, may demand the auditor's participation in class to whatever extent deemed desirable.

You may not satisfy by audit a stated prerequisite for a graduate course. Additionally, you may not establish credit through examination in any course for which you were previously registered as an auditor.

Withdrawing From Courses

As a graduate student in the N/CSM Department you will be permitted to drop courses in which you are enrolled only in exceptional cases and with the prior approval of your major advisor and/or program coordinator and the course instructor. If you drop a course when you have an assistantship, and your course load drops below nine credit hours, your assistantship may be revoked for that semester.

Repeating a Course

Under some circumstances, graduate students may repeat courses in which they received a D or F. If you repeat a course for which you received a grade of D or F, you do not receive additional credit. The grades from the two courses are averaged; the D or F is not dropped.

Continuous Enrollment, Leave of Absence

All graduate students in either graduate program are expected to maintain continuous enrollment during fall and spring semesters. Graduate students who do not maintain continuous enrollment are subject to the requirements in effect at the time you return. Only students who are enrolled are eligible to use University facilities and human resources. Note that you must meet minimum enrollment requirements to be eligible for financial aid.

To prevent the possibility of termination of financial support, you must request and be granted a leave of absence from the department. Your request must be approved by both the program coordinator and the department chair. A leave of absence will be granted only in exceptional cases. If you have an assistantship or fellowship and take a leave of absence, you are not guaranteed financial support upon your return, even if you did not use up all your support before your leave. Students failing to maintain continuous enrollment (excluding summer terms) must apply to the Graduate School for re-entry and obtain approval from their department.

Withdrawing from the Program/University

If for any reason you decide to withdraw from the program, inform the program coordinator, who will inform you of the procedures to be followed to officially withdraw from the University. Failure to follow the procedures may result in your owing tuition and other fees to the University. This applies to both domestic and international students.

Advisory Committee

Each student in the master degree program must have an Advisory Committee consisting of a minimum of three full-time tenured or tenured-track graduate faculty. At least two of the faculty must be permanent graduate faculty in the NCSM Department one of which must serve as the chair of the committee. The committee chair also serves as the student's major advisor when the student has selected the Thesis Program Option. The program coordinator serves as the academic advisor for graduate students enrolled in the Non-Thesis Program Option. The Advisory Committee must be formed in the second semester of a full-time student's matriculation through the program and as approved by the Graduate Coordinator for all distance learning students.

Major Advisor

If you are enrolled in the Thesis Program Option, you need to select a major advisor as early in your program as possible but no later than the end of your second semester in the program. You must identify a major advisor from among the program faculty with whom you will work throughout the course of your studies and this person will serve as the Chair of your Advisory Committee.

The selection of your major advisor is one of the most important decisions you will face as a graduate student. Your major advisor helps plan your curriculum and guides your research activities and the preparation of your thesis. Choose carefully: to facilitate your progress through the program as well as the quality of the program itself, a change of major advisor will be permitted only under the most unusual circumstances.

During each semester, you should meet with your major advisor to discuss your progress in the program. Students funded under a teaching assistantship will be contacted by the program coordinator or department chair regarding their assignment.

Advisory Committee

You will form an Advisory Committee in consultation with the program coordinator in the case of being enrolled in the Non-Thesis Program Option or with your major advisor, if enrolled in the Thesis Program Option. For either Option, the committee members must be identified no later than the end of your second semester in the program. If in the Thesis Program Option, your Advisory Committee will approve your curriculum, supervise your graduate program, administer your comprehensive examination, and initiate the recommendation for awarding your degree. If enrolled in the Non-Thesis Program Option, the program coordinator will approve your curriculum, supervise your graduate program, administer your comprehensive examination(s), and initiate the recommendation for awarding your degree, all in conjunction with your committee.

Plan of Study (GS2)

The graduate degree curriculum form (form GS2) must be filed no later than the last day of classes of the term before the term in which you plan to graduate. The GS2 represents the formulation of an individual student's curriculum as approved by your Advisory Committee. It must adhere to Graduate School as well as departmental policies. Courses in excess of those required for the degree should not be listed on the GS2. Any questions concerning undergraduate deficiencies, transfer of graduate credit from other institutions, special program requirements, etc., should be resolved before the GS2 is submitted.

Advisory Committee approval of your plan of study is indicated by their signatures on the GS2. The form must also be approved by the major department chair and the deans of the college and Graduate School. The form is available on the Graduate School's website at www.grad.clemson.edu/forms/GeneralForms.php.

You must complete any class listed on your GS2 before graduation; if you fail to do so, you must file a revised GS2. Prior to graduation, you may revise your degree curriculum as needed subject to the necessary Advisory Committee, department chair and dean approvals. In extremely rare situations, it may be necessary to change committee membership. In either case, you must submit a revised GS2.

Assistantships/Financial Support

Graduate Assistantships

The N/CSM Department awards assistantships to full-time graduate students, which result in a substantial reduction in tuition. The current assistantship amount per semester will vary as well as the number of hours the student will work for that department and this and other information is contained in an Offer of Assistantship. To qualify for an assistantship award, students must meet and maintain the conditions noted below and in the Offer of Assistantship which includes being enrolled in no fewer than nine graduate course credit hours each academic semester and, when assistantships are available in the summer, for three credit hours each session.

A CSM assistantship award is considered an honor made on the basis of available funds, previous academic performance, performance on entrance examinations and the decision of the program coordinator. To retain an assistantship, all students must maintain a cumulative grade point average of 3.0 and must receive satisfactory performance assessments from their immediate supervisor. If students are placed on probation, their assistantships may be removed so they can devote the needed time to their studies and regain the minimum cumulative grade point average. In addition, if a student does not receive a satisfactory assessment from their assigned supervisor each semester, the assistantship may be removed.

Graduate Assistant Responsibilities

The N/CSM department expects graduate students to work a designated number of hours per week as noted in the Offer for Assistantship. The duties may include, but are not be limited to, the following:

1. Provide support to faculty on their instructional assignments. This includes such tasks as proctoring examinations, grading papers and developing instructional materials.
2. Provide assistance to the department chair and/or faculty on research projects. Specific tasks will vary depending on the need.
3. Provide assistance to the administrative staff. Duties will vary with need.

Graduate students on assistantships work on the same calendar as faculty with a nine-month appointment. Unless prior permission has been obtained for a different schedule, graduate assistants must be available as of the Monday of the first week of classes until the end of final examination week for the fall semester, and Monday of the first week of classes until the end of final examination week for the spring semester. Not adhering to these dates is grounds for removal of the assistantship.

At the beginning of each semester, the graduate assistant meets with his/her assigned faculty or staff member (supervisor), and together they develop a work schedule. A copy of the graduate assistant's class schedule must be given to the assigned supervisor, along with any other information that may impact work performance.

It is the graduate students' responsibility to report to his/her assigned supervisor at the times agreed upon, whether or not work has been given. In addition, extenuating circumstances may require graduate assistants to work at times other than those scheduled. These times will not conflict with scheduled class times.

In the event that a supervisor does not have sufficient assignments for the graduate assistant to work the required number of hours, it is the student's responsibility to report to the department administrative assistant for work assignments. In the event the administrative assistant does not have any work, the graduate assistant must report to the program coordinator for further assignments. Graduate assistants who do not demonstrate an effort to maintain the required number of hours may lose their assistantships.

As noted below, paychecks are automatically deposited into the graduate assistant's bank account. Unsatisfactory performance, as described herein, may result in a stop payment on the biweekly deposits. If the graduate assistant has paid work assignments other than the department assistantship, the N_rCSM Department work must take precedence. If this is not possible, then the assistantship will be removed.

Graduate assistants are responsible for completing the graduate assistant time sheet every week and submitting it to the department administrative assistant. The sheet requires students to indicate how many hours they worked and what duties were performed; the immediate supervisor's signature is required. The time sheet is due in the department office by 4:30 p.m. on Monday following the end of the previous week. Failure to comply with this requirement may result in the immediate loss of the assistantship.

The N_rCSM department expects all graduate students to perform satisfactory work to retain assistantships. This includes not only working a designated number of hours per week, but also obtaining satisfactory assessment from the assigned supervisor(s).

Unsatisfactory job performance will be managed as follows:

1. Graduate assistants who are not performing satisfactorily will first be given a verbal warning from their assigned supervisor.
2. Upon the second incidence of unsatisfactory performance, the assigned supervisor will give the graduate assistant a second verbal warning and notify the graduate coordinator of the incident in writing or by email.
3. If the unsatisfactory performance continues, the assigned supervisor will notify the program coordinator, who will initiate action to immediately remove the assistantship.

If a graduate assistant disagrees with an unsatisfactory assessment, he or she can submit a written appeal to the program coordinator within five days of the unsatisfactory performance notification. The program coordinator will investigate the appeal and take the appropriate action, which will be final.

Assistantships for master degree students normally extend for a maximum of four continuous academic semesters and continuation is contingent upon satisfactory academic performance, satisfactory performance of assigned duties, availability of needed funding support and adhering to all university graduate student requirements.

Fellowships

Fellowships are available from organizations outside Clemson University. Information on these opportunities is available from the department and from the Graduate School website (www.grad.clemson.edu/fellowships.php).

Employment-Related Information

Income taxes

The State of South Carolina, as well as the U.S. government, levies an income tax. Therefore, as a general rule, state and federal taxes will be withheld from your pay and you will need to file income tax returns with both the state and federal taxing agencies.

Paydays

Paydays are alternate Fridays. When you go on the payroll for the first time, you will have a two-week lag before you will be paid. This “lag pay” is paid out after your termination from your position.

Paperless pay

Stipend checks must be direct-deposited through the University system. You must fill out an “Authorization for Deposit of Net Pay” Form upon starting your assistantship.

This action is mandatory; no exceptions. Pay stubs will not be given/mailed to you, but are available electronically through MyCLE.

To view your pay stub and other employment-related information on MyCLE, go to bb.clemson.edu, Enter your *employee* ID and password in the username and password fields and click "Login". (If you do not know your employee user ID, you can obtain it by presenting a photo ID at the CCIT Help Desk in Martin M-1.) Then select "View Paycheck" from the CU Faculty & Staff Resources list. Re-enter your employee ID and password to sign in to PeopleSoft. Your most recent pay stub will appear.

Work injury protocol

Should you be injured during the course of your employment responsibilities, you must immediately report the injury to your supervisor. Your supervisor should then immediately call the workers' compensation insurance company. Their medical manager will gather information about the accident and direct you to a healthcare facility or physician for treatment. No coverage will be provided for work-related claims unless reported by your supervisor before you receive medical treatment at the authorized provider. In the event of severe injury/emergency, call 911 first, and then execute the above procedures.

Work product

Computer programs written, data generated, discoveries made, derivations developed, etc., in the course of your assistantship are the property of Clemson University.

Reduction of pay

Normally, your agreed-upon workload will be submitted as hours worked for each payroll period. However, if the amount of work you perform consistently deviates below the required workload, your pay will be reduced accordingly. Due to the procedure in which time sheets are currently used, it may be necessary to implement any pay reductions in the pay period following the one in which the work deficiency actually occurred. Pay also may be withheld from students who violate the vacation policy (see below).

Vacation policy

Graduate assistants do not accrue paid vacation time. Your work timeframe should not be perceived to be the same as the semester class schedule. Generally, graduate assistants work on the same calendar as faculty with 9-month appointments unless different work expectations are distinctly articulated in your Assistantship Offer. In the event of a death in your immediate family, illness of a close family member or personal illness or hardship, you may request up to four weeks leave without pay per academic semester.

Military leave policy

The Graduate School has ruled that a graduate student on military leave, for example summer camp, will not receive a stipend for the period of that leave. Students planning to take military leave should notify the Program Coordinator of the inclusive dates. Short periods of about one week can be taken as regular vacation with no interruption in pay.

Students leaving the campus for six weeks to attend summer camp must obtain written permission from the dean of the Graduate School to be excused from the continuous enrollment provision.

Holidays

Graduate students are entitled to take as holidays the days on which the University is officially closed. See the official University holiday schedule at www.clemson.edu/humanres/Payroll_Benefits/holidays.htm.

Termination of pay

Pay for any session will end when you leave Clemson or are no longer available for work assignments. Normal termination dates for the spring and fall semesters for students not continuing into the next session is graduation day. Any deviations from these dates must be approved by the program coordinator or the department chair.

Outside Employment

One of the purposes of a graduate assistantship (research, teaching or administrative) is to support your subsistence during your graduate studies. Therefore, it is the policy of the department to disallow you from outside employment if you hold more than a ½-time assistantship. Exceptions to this policy include temporary consulting and/or tutoring jobs, which you may do if you receive approval from your major advisor, program coordinator and department chair.

Process and Procedures

Schedule of Courses

The NCSM Department does not maintain a regular annual schedule of when graduate courses are offered. The courses to be offered in the department are determined semester-by-semester based on the needs of the students enrolled in both graduate programs. The program coordinator will inform all of the graduate students which courses will be offered during the registration period for the next semester.

See Appendix A for a complete list of courses and their official descriptions. Note that instructors have some leeway in modifying the course and content.

Department and Graduate School Forms

You will be required to complete the following forms through the course of your studies. Up-to-date versions of the Graduate School forms are available at www.grad.clemson.edu/forms/GeneralForms.php. Departmental forms are available from the program coordinator.

Forms to Complete in the CSM Graduate Programs			
<u>Form ID</u>	<u>Required By</u>	<u>Approximate Deadline</u>	<u>To be Signed By</u>
GS2 – Plan of Study	Graduate School	Semester prior to graduation	Advisory Committee members, department head, dean of college, dean of Graduate School
Diploma Application	Graduate School	Within first four weeks of semester in which you will graduate	Online submission — user ID required
GS7 – Final Comprehensive Exam and Thesis/Dissertation Approval Form	Graduate School	Two weeks prior to graduation	Advisory Committee members
Department Expectations for Graduate Work	CSM Department	Prior to End of First Semester in Program	Student

See specific deadline dates for Graduate School forms at www.grad.clemson.edu/Deadlines.php.

Checklist/worksheet of requirements

Use the following checklist to track your completion of program requirements.

Checklist for Master's Students in CSM Master			
<u>What</u>	<u>When to Complete</u>	<u>How/Who</u>	<u>Date Completed</u>
Selection of a Major Advisor if in Thesis Option	Before the end of your first semester	Notify Program Coordinator	
Selection of Advisory Committee	Before the end of your second semester	In consultation with your Major Advisor or Program Coordinator	
Preparation of curriculum	Before the end of your first semester	In consultation with your Major Advisor and Advisory Committee	
File plan of study	No later than as stipulated in Graduate School Calendar	Form GS2	

Approval of thesis proposal	Prior to the end of your second semester	Advisory Committee signs proposal; you file proposal with Program Coordinator	
Minimum of 36 credit hours of graduate courses completed	Within six calendar years prior to graduation	Form GS2	
Apply for diploma	Beginning of final semester*	You fill out online via SISWeb	
Order cap and gown	Beginning of final semester	You order through bookstore	
Submit your thesis	1 st draft at least 12 weeks before date of final exam; final (approved) copies at least 2 weeks prior to exam	You supply to your Advisory Committee	
Final Examination	At least 3 weeks prior to graduation*	Major Advisor files GS7 with Graduate School	
Submit your manuscript to Graduate School for formatting review	At least 2 weeks prior to graduation* (earlier is better)	You submit online at dissertations.umi.com	
All formatting revisions completed, approval of manuscript by Graduate School	At least one week prior to graduation*	Via email and website; the manuscript review office will notify you of any revisions required and how to submit them	

* See specific deadline dates for Graduate School forms at www.grad.clemson.edu/Deadlines.php. Directed Studies

Directed Studies

The Department allows students enrolled in the master degree program to conduct an in-depth study of a specific topic related to the construction program. It is not intended to take the place of any required course or to serve as a substitute for a series of major or free electives. Students may take CSM 8900 – Directed Studies for a maximum of six semester credit hours.

Students must have formal approval to enroll in CSM 8900 the semester before they want to take it. Students cannot preregister or register for the course until they have obtained this approval. To receive approval, students must submit a written request to their major advisor and/or the program coordinator. The report must include topic to be studied, product of the study (if a report, it must be typed in accordance with the faculty

member's instructions), list of activities to complete the product and a date by which each will be accomplished, the name of the faculty member who will work with the student and evaluate the end product and student's signature and date.

The request must be submitted in triplicate to the major advisor and/or graduate coordinator. If the request is approved, one copy will be sent to the designated faculty member, one copy will go to the student and the other copy will be retained in the N₇CSM Department's student's file.

Guidelines for Faculty

Major Advisor

You, the student, have primary responsibility for ensuring that you meet all requirements; your Major Advisor is responsible for ensuring that you have met that responsibility. Your Major Advisor will present any requests for a waiver of a requirement to the program coordinator and/or department chair for approval.

Program Coordinator

The Program Coordinator serves an oversight role to 1) maintain departmental graduate student files; 2) ensure that students and committees meet all stated deadlines and requirements; 3) notify the faculty when GS2 forms are placed on file for each student; and 4) to moderate disagreements over guidelines. The Program Coordinator also ensures that requests for waivers from the guidelines are presented to the faculty in a timely manner; judges matters of course equivalence; and serves as intermediary during challenges by the faculty of a graduate student's program or performance. Furthermore, the Program Coordinator determines whether requests for changes in your plan of study (GS2) or Advisory Committee composition constitute "minor" changes, and may approve such minor changes on behalf of the faculty or consult with faculty to determine whether requested changes warrant full faculty approval.

N₇CSM Faculty Teaching Graduate Courses

The N₇CSM faculty teaching graduate courses determine the guidelines for all graduate degree programs. The faculty may amend the guidelines for the graduate degree programs by a simple majority of those voting; all faculty will be polled. The faculty teaching graduate courses have the authority to approve or reject candidates for the graduate degree and certificate. Any concern by individual faculty members about your plan of study or conduct in the program should be presented to the program coordinator as soon as possible. The program coordinator will communicate any concerns, where applicable, to your Major Advisor for possible action. If the faculty member who raised the concern still wishes for the matter to be considered by the full faculty, the program coordinator will bring the matter before the faculty teaching graduate courses at a regular meeting.

Professional Development

There are a number of opportunities for you to develop professionally in addition to your course work and research. These include presenting talks and/or posters at regional and national conferences, becoming a student member of professional organizations, and preparing for your eventual job search. In addition, the Graduate School provides a professional development framework at www.grad.clemson.edu/PDframework.

Career Planning

The Michelin Career Center provides information about market conditions and gives assistance in acquiring knowledge about your career opportunities and job requirements. The Center hosts career fairs each fall and spring, and offers workshops in a variety of career-related topics. The Center also provides information about internships and part-time and summer work. For more information, see their website at career.clemson.edu or call (864) 656-6000.

In addition, the N_ACSSM Department conducts two Corporate Partner Career Fairs each academic year that you are invited to attend. Announcements will be made when they will

Professional and Student Organizations

It is recommended that all full-time graduate students join the Department's Constructors Guild which is the major department student club. In joining the Guild you will also have the opportunity to join student chapters of major construction trade associations in the United States.

Student Government

The Graduate Student Government represents the interests of all graduate students at Clemson. Generally the GSG promotes student participation in University affairs and learning experiences. It also elects representatives to various University boards and committees. Participation in the GSG can provide valuable leadership experience.

Professional Certification Requirements

While there are no professional certifications required for graduation, it is highly recommended that all graduate students sit for the American Institute of Constructors

Level I and/or Level II, whichever are appropriate, examination(s). Information on the certifications is available from the program coordinator.

Administrative Policies & Procedures

Accessibility Statement

“Clemson University values the diversity of our student body as a strength and a critical component of our dynamic community. Students with disabilities or temporary injuries/conditions may require accommodations due to barriers in the structure of facilities, course design, technology used for curricular purposes, or other campus resources. Students who experience a barrier to full access to this class should let the professor know, and make an appointment to meet with a staff member in Student Accessibility Services as soon as possible. You can make an appointment by calling 864-656-6848, by emailing studentaccess@lists.clemson.edu, or by visiting Suite 239 in the Academic Success Center building. Appointments are strongly encouraged – drop-ins will be seen if at all possible, but there could be a significant wait due to scheduled appointments. Students who receive Academic Access Letters are strongly encouraged to request, obtain and present these to their professors as early in the semester as possible so that accommodations can be made in a timely manner. It is the student’s responsibility to follow this process each semester. You can access further information here: <http://www.clemson.edu/campus-life/campus-services/sds/>.

Disability Access Statement

“It is university policy to provide, on a flexible and individualized basis, reasonable accommodations to students who have disabilities. Students with disabilities requesting accommodations should make an appointment with Disability Services (656-6848), to discuss specific needs within the first month of classes. Students should present a Faculty Accommodation Letter from Student Disability Services when they meet with instructors. Accommodations are not retroactive and new Faculty Accommodation Letters must be presented each semester.”

Harassment

It is the policy of Clemson University to conduct and provide programs, activities and services to students, faculty and staff in an atmosphere free from harassment. Harassment is unwelcome verbal or physical conduct, based upon race, color, religion, sex, sexual orientation, gender, national origin, age, disability, status as a military veteran or protected activity (e.g., opposition to prohibited discrimination or participation in the statutory complaint process), that unreasonably interferes with the person's work or educational performance or creates an intimidating or hostile work or educational environment. Examples may include, but are not limited to, epithets, slurs, jokes or other verbal, graphic or physical conduct.

Harassment of University faculty, staff, students or visitors is prohibited and shall subject the offender to appropriate disciplinary action, including dismissal from the program.

Employees or students who feel they are victims of any form of discrimination are encouraged to consult the Office Access & Equity (E-103 Martin Hall, (864) 656-3181) for advice and assistance in resolving complaints.

In the event a graduate student wishes to appeal the resolution of the Office of Access & Equity, the student must submit a written request for an appeal to the dean of the Graduate School, who in turn will convene an ad hoc committee that will review the process and/or sanction. The committee membership will come from faculty and students already appointed to the Graduate Council.

Sexual harassment and Sexual Violence

Title IX of the Education Amendments of 1972 (amending the Higher Education Act of 1965) is a federal gender equity law that prohibits discrimination based on sex in education programs and activities that receive federal funding. Sexual harassment, which includes sexual violence and other forms of nonconsensual sexual misconduct, is a form of sex discrimination and is prohibited under this law.

Clemson University is committed to providing a higher education environment that is free from sexual discrimination. Therefore, if you believe you or someone else that is part of the Clemson University community has been discriminated against based on sex, or if you have questions about Title IX, please contact the Title IX Coordinator Alesia Smith who is also the Executive Director of Equity Compliance, at 110 Holtzendorff Hall, 864-656-3181 (voice) or 864-656-0899 (TDD). The Title IX Coordinator is the person(s) designated by Clemson University to oversee its Title IX compliance efforts (<http://www.clemson.edu/campus-life/campus-services/access/title-ix/>).

Title VII of the Civil Rights Act of 1964, as amended, provides that it shall be unlawful discriminatory practice for any employer, because of the sex of any person, to discharge without just cause, to refuse to hire, or otherwise discriminate against any person with respect to any matter directly or indirectly related to employment. Harassment of any employee on the basis of sex violates this federal law. The Equal Employment Opportunity Commission has issued guidelines as to what constitutes sexual harassment of an employee under Title VII.

Unwelcome sexual advances, requests for sexual favors, and other verbal or physical conduct of a sexual nature constitute sexual harassment when any of the following occurs:

1. Submission to such conduct is made explicitly or implicitly a term or condition of an individual's employment or academic standing;
2. Submission to or rejection of such conduct by an individual is used as a basis for employment or for arriving at academic decisions affecting an individual;

3. Such conduct unreasonably interferes with an individual's work or academic performance, or creates an intimidating, hostile or offensive working or academic environment.

Sexual harassment of University faculty, staff or students is prohibited and shall subject the offender to dismissal or other sanctions after compliance with procedural due process requirements. In the event a claim of sexual harassment arises, the claimant may use University grievance procedures that have been established for faculty, staff and students as appropriate. This policy also prohibits an employee from sexually harassing a superior and a student from sexually harassing a faculty member.

Amorous Relationships

Amorous relationships that might be appropriate in other circumstances can be inappropriate when they occur between a faculty member, officer or supervisor of the University, and any student or subordinate employee for whom he/she has a professional responsibility.

Those in positions of authority inherently carry the element of power in their relationships with students or subordinates. It is imperative that those with authority neither abuse, nor appear to abuse, this power entrusted to them.

Officers, supervisors and members of the teaching staff should be aware that any romantic involvement with a student or subordinate employee could make them liable for formal action if a complaint is initiated. Even when both parties have consented to such a relationship, it is the officer, supervisor or faculty member who may be held accountable for unprofessional behavior. Difficulties can also arise from third parties who may feel that they have been disadvantaged by such relationships. Graduate assistants, research assistants, tutors and teaching assistants who are professionally responsible for students would be wise to exercise special care in their relationships with students they instruct or evaluate.

Any questions concerning these statements or Clemson University's Policy on Sexual Harassment should be directed to the Office Access & Equity (E-103 Martin Hall, (864) 656-3181).

Drugs, Alcohol, Smoking

Drugs

The use, possession, distribution or dispensation of illegal drugs is strictly prohibited. Violation could result in your dismissal from the University.

Alcohol

Alcoholic beverages are prohibited for any activity on campus unless prior University approval has been obtained.

Smoking

In the interest of the safety and health of all the occupants of our buildings, the following smoking policy will be enforced: 1) No smoking is allowed in any classroom, hallway, laboratory, office or other public spaces; and 2) smoking is permitted only outside of University buildings or other University-designated areas. These rules are necessary not only for health reasons but also for general building safety.

Computer Use

CCIT offers numerous instructional short courses. Visit their website at ccit.clemson.edu/services/training for details.

Email Access, Use

Email is the most common medium used by the department and the University to communicate with you. Many events and information of importance to your success in the program are announced via email. It is very important that you check your email regularly, at least once a day. If you are requested to respond, you should do so in a timely manner. Note that if you have an assistantship, you will have both a student and an employee email account and will be responsible for checking both on a regular basis.

Mailboxes

Full-time graduate students in the department do not have mailboxes.

Intra-department Communications

Notices of interest to graduate students will be e-mailed directly to you.

Copy Machine Use

Graduate assistants may use the departmental copier for necessary work assigned to them with the approval of the program coordinator and department chair. Please coordinate all copying with the department's administrative assistant.

Telephone Use, Long Distance Charges

Use of departmental office telephones must be restricted to business use and emergencies during business hours. You must inform your friends and family not to call you on the departmental office phone on routine matters. With the permission of the program coordinator and department chair, you can use departmental phones for business-related long-distance calls. CAUTION: Never use your University code for personal calls; all long-distance calls are documented on monthly bills.

Office Supplies

The department does not furnish office supplies to graduate students for personal use. All graduate assistantship work requiring the use of office supplies must have the approval of the program coordinator and department chair first.

Ordering Supplies and Equipment

Graduate students are not allowed to order any equipment and supplies.

Student Offices/Desks

Desk space is available to full-time graduate students in the program.

Faculty Offices

Faculty members carry out numerous duties, of which teaching and research are but two. Please observe faculty office hours when posted and arrange appointments in advance whenever possible. Do not enter a faculty member's office unless invited to do so.

Dress Code

On December 3, 1969, the Board of Trustees of Clemson University delegated the power to the student body of Clemson University to recommend rules that regulate student conduct on campus. Clemson University does not have a dress code beyond that defined by local, state and federal laws. Consequently, beyond enforcing dress appropriate to the occasion for safety purposes, the Department of Construction Science and Management does not regulate dress codes. However, the faculty strongly urges graduate students to dress appropriately for meetings and special occasions. Being poorly or improperly dressed for an occasion may impair your future success in obtaining employment. You are representing yourself, the department and the University when you attend professional meetings, seminars, guest lectures, etc. Accordingly, you should consider how you will present yourself at all professional occasions. Graduate students are expected to abide by all guidelines pertaining to appropriate safety regulations including dress for laboratories and outdoor environments.

Student Travel

Any travel required as part of your graduate studies and/or assistantship work will be in accordance with University and N/CSM Department policies and procedures. Consult with the program coordinator for details.

Inclement Weather

Cancellation of classes due to inclement weather is determined by University Administration and announced through local radio and television stations. University Administration attempts to alert students of any disruption of scheduled classes by 7 a.m. Separate announcements are made for the main campus and the University Center in Greenville, so you should listen carefully to the specific announcement.

N/CSM Department Student Advisory Committee

The N/CSM Department has a Student Advisory Committee which has one full-time graduate student on it. The graduate student representative is selected at the beginning of each academic year. This individual also serves on the College of AAH Dean's Student Advisory Council.

Political, Religious Activities

The University cannot engage in political and religious activities. Therefore, it is departmental policy that no political or religious signs will be displayed in Lee Hall. Nor should University email lists/systems be used to transmit political or religious messages.

Campus Facilities and Resources

Emergencies

Call the Clemson University Police Department ((864) 656-2222) for all major emergencies: fire, medical, police. They will ensure that the proper authorities are dispatched.

- In case of fire, exit the building immediately. Use stairwells; do not use the elevator.
- In case of tornado warning, take shelter in the appropriate location in the building in which you are in.

Graduate Student Government

The Graduate Student Government (GSG) is a University-wide organization of all graduate students for promoting graduate student interests. At the start of each fall semester, departmental GSG representatives are elected. The biweekly senate meetings are open to all graduate students. See the *Graduate School Announcements*

(www.registrar.clemson.edu/html/catalogGrad.htm) for more information, or contact the GSG office at (864) 656-2697. Your active participation in the Graduate Student Government is encouraged.

R.M. Cooper Library

Located on campus adjacent to the reflecting pool, the main library houses more than 1.5 million items, including books, periodicals and microforms. Periodicals can be checked out for a maximum of three days (\$1/day late fee) while books can be checked out for six weeks (\$0.25/day late fee). The catalog is online and can be accessed from any campus computer. Free online literature searches can be conducted at the main library. An appointment must be made to complete the online search. In addition, the library contains a number of computers and printers as well as copiers, two of which are located in the reference area, and several of which are located on the ground floor. Additionally, there is a coffee shop and convenience store located within the library. For more information about the library, call (864) 656-3024 or the Library Hours Hotline at (864) 656-3027.

The library also has two satellite branches. The Emery A. Gunnin Architectural Library, located in Lee Hall, provides materials on architecture, visual arts, city and regional planning, building science and constructions, and landscape architecture. Its extensive slide library can also be helpful to those interested in history, art, etc. The library's Special Collections Unit, housed in the Strom Thurmond Institute building, contains rare books, manuscripts of prominent South Carolinians, and materials relating to the history of Clemson University and South Carolina. A smaller, specialized collection is also located in the Chemistry Library in Hunter Hall.

Printing Services

Printing services is available at: <https://www.clemson.edu/campus-life/campus-services/print-smart/printing-services/> at

University Union, Hendrix Student Center, and Brooks Center

The Edgar Brown University Union, the Hendrix Student Center, and the Brooks Center for Performing Arts provide social, educational, cultural, and recreational activities for members of the University and larger community. Hundreds of varied activities are offered to the campus community each year, including films, videos, concerts, bands, comedy and variety acts, short courses, speakers, game tournaments, cultural arts performances, outdoor recreational trips, group travel, and special events.

University Bookstore

The University Bookstore is located on the first floor at Douthit Hub. It stocks all required textbooks and supplies as specified by the various departments, as well as general trade books, greeting cards, computer software, personal care items, etc. The

bookstore holds textbook buy-back year-round. The bookstore accepts VISA, MasterCard, and Tiger Stripe. The bookstore also allows students to buy their books online: www.whywaitforbooks.com. Once you get there just pick South Carolina, then Clemson, then the name of your department, then your course and section number. Graduate assistants and teaching assistants may be eligible for discounts at the University Bookstore.

University Health Services

The Redfern Student Health Center on campus provides health services to University students. Redfern offers a variety of services including: outpatient ambulatory care for illnesses and injury, health education on women's health issues, nutritional counseling, dermatology, and orthopedic clinics. Students are seen at Redfern throughout the day by appointment. A walk-in clinic is available to students who do not have an appointment. ASK-A-NURSE telephone services are also available.

If you have questions about services provided, call Redfern Health Center at (864) 656-2233; if you would like to schedule an appointment to see a doctor at Redfern, call the appointment line at (864) 656-1541. For service hours or other information, see their website at <http://stuaff.clemson.edu/redfern/>.

Fike Recreation Center

Graduate students may use these facilities. Lockers are available at the recreation center. For specific information about the facilities and activities offered, visit staff.clemson.edu/campusrec/facilities.html.

Sporting Events

Graduate students may purchase season tickets for Clemson football and basketball games. If interested, you should inquire at the IPTAY ticket office (Gate 9, Memorial Stadium) to complete an application. Further information can be obtained from the ticket office ((864) 656-2118). Baseball games are free with University ID. Tickets for soccer games may be purchased at the gate (usually \$3 with University ID).

Campus Parking

Parking on campus is restricted and requires a permit that can be purchased at Parking Services located on the ground level of the Edgar Brown University Union ((864) 656-2270) or via their website at staff.clemson.edu/parking.

NEARING GRADUATION

Thesis

The purpose of a thesis is to demonstrate your capability to:

- Formulate a research problem;
- Demonstrate knowledge relevant to a meaningful resolution of a specific problem;
- Effectively plan the work leading to the completion of the problem;
- Report the results of your research in concise, precise professional style.

General Guidelines

All theses shall be prepared in accordance with guidelines established by the Graduate School (see www.grad.clemson.edu/Manuscript.php). This guide provides advice on preparing an acceptable and effective thesis. You should consult this guide before beginning the writing phase of your graduate research. Pay particular attention to formatting requirements.

Planning

Task planning is a very important part of any research program. The deadlines for the tasks depend on the date of anticipated graduation and are presented in the *Graduate School Announcements*. A list of the deadlines is also available from the Graduate School website, www.grad.clemson.edu/Deadlines.php. Failure to meet any of these deadlines will result in postponement of your graduation.

You must allot sufficient time for writing the thesis. It is highly recommended that you fully complete your thesis before leaving the University. Many former students who left without completing their thesis still have not completed their degree requirements. Experience shows it is very difficult to complete a thesis after leaving the University.

Prior Student Theses

Prior student theses are available from the CSM Department office for your review.

Proposal Preparation, Format, Contents

The proposal is a persuasive document intended to present a brief, concise argument about the worthiness of your research. You should complete a final draft of the proposal in accordance with your major advisor's guidelines by May of your first year. The written document should reflect your effort and not that of your major advisor. Your major advisor may work with you on points of clarification to improve the structure of the document.

Your major advisor will review your initial draft and offer suggestions for changes. Upon his/her approval, you or your major advisor will distribute copies to the other Advisory Committee members for their comments.

Writing the Thesis

The writing process usually begins toward the end of the research period. The document must be written in a format that is acceptable to the Graduate School for theses. You should follow the formatting rules provided by the Graduate School at www.grad.clemson.edu/Manuscript.php. The Graduate School's manuscript website provides examples of properly formatted pages, tables and figures. You can format the document yourself, or hire someone to do this for you. It typically takes anywhere from 10-30 hours to format a manuscript. Formatting can be difficult and it is often more efficient to leave this activity to a professional. The Graduate School's website offers a list of typists available in the Clemson area.

Review and Approval

You should complete a final draft of your manuscript for your major advisor's approval in accordance with his or her requirements. Final copies of a version approved by your major advisor must be submitted to your Advisory Committee in accordance with your major advisor's requirements. It is within the rights of any committee member to refuse to meet for your defense if they have not been given the required review period. Your oral comprehensive examination must be administered at least three weeks prior to the date on which your degree is to be conferred.

As you near completion of your thesis, you must defend your work to your Advisory Committee in a formal setting which comprises your oral comprehensive examination. Your committee will typically request that you make a 10 to 15-minute presentation of your research followed by questions from your committee members on the thesis and course studies. The actual structure and content of your defense is determined by your major advisor.

As a result of their review of the written document and your oral comprehensive examination, your Advisory Committee may require that you do more work. After completion of that work, your Advisory Committee will provide any comments or corrections that you must make to your manuscript. Your Advisory Committee may also request a second comprehensive oral examination especially if the first one was not satisfactory. After you make the corrections, you must submit your manuscript electronically to the Graduate School for formatting review (see below).

Formatting Guidelines and Electronic Submission

Once you have defended your thesis, you must submit it electronically to the Manuscript Review Office of the Graduate School for formatting review. The Graduate School enforces specific formatting guidelines to ensure that your manuscript is considered

credible and professional. Templates, examples and specific guidelines are provided on the Graduate School website (www.grad.clemson.edu/manuscript) to assist you in formatting. You will not be allowed to graduate until the Manuscript Review Office has approved your final manuscript.

The Manuscript Review Office uses an electronic thesis submission process (ETD). Hard-copy (i.e., paper) manuscripts will *not* be accepted. Not only does this process make your manuscript more accessible, but it also costs you much less due to the minimization of printing costs.

For more information about ETD and the formatting process, see www.grad.clemson.edu/manuscript.

Patent, Copyright/Publishing Information

Clemson University and the Nieri Family Department of Construction Science and Management retain full ownership rights to any inventions, discoveries, developments and/or improvements, whether or not patentable (inventions), which are conceived, developed or reduced to practice, or caused to be conceived, developed or reduced to practice by graduate students during the course of their research activities conducted as part of any Graduate School curriculum. Any such invention will be handled by the University in the same manner as set forth in The Faculty Manual of Clemson University (www.lib.clemson.edu/fs/FacultyManual/facman1.htm).

You will retain copyright ownership of your thesis. However, the right to publish research will be maintained by the Department of Construction Science and Management. Copyright ownership of any research publications will be determined by University policy and by the policies of organizations responsible for publishing or distributing copyrighted materials.

All graduate students should keep a formal notebook for recording research procedures and results. Students are urged to study the recommendations for maintaining proper research records that are listed at the University's Patent Policy page (www.clemson.edu/extension/Policy/misc/patents.htm).

All data, research notebooks and related materials (slides, pictures, graphs, publication reprints, etc.) generated by any graduate student within the department are the property of the department and will remain in the department after your graduation/departure. You must collect these materials and submit them to your major advisor before you graduate/depart. The major advisor will have final authority on the disposition of any or all of these materials.

Application for Diploma

You must submit a formal application for a diploma to the Graduate School. You must complete this form online in the first four weeks of the semester in which you intend to graduate. Early submission is not accepted (e.g., do not complete the form in January if

you do not plan to graduate until August or December, only if you plan to graduate in May). If you miss the deadline, you must contact Enrolled Services to receive a hard-copy version of the application; late fees will accrue. If you submit the form and, for some reason, do not graduate in that semester, you must re-submit in each term in which you hope to graduate thereafter.

If your name in the student database is not as you want it to appear on your diploma (due to marriage, etc.), you must contact Enrolled Services prior to submitting the Diploma Application form online. Any degree/major changes via form GS2 must also be processed before you submit the Diploma Application.

There is no fee to receive a diploma if you attend the graduation ceremony or agree to pick up your diploma in the Enrolled Services office in Sikes Hall. There is a fee assessed if you request that your diploma be mailed to you.

For more information, contact Enrolled Services at (864) 656-5339, if your last name begins with A-L, or (864) 656-5341 if your last name begins with M-Z.

If you choose to participate in graduation ceremonies, you should make arrangements for cap and gown purchase (or rental, if preferred, for PhD gowns) at this same time. See the Clemson University Bookstore's website at www.clemson.edu/bookstore/gsupplies.htm for deadlines and more information.

APPENDICES

Appendix A – CSM Graduate Course Descriptions

CSM 6300 Residential Construction Management

Exploration into key topics, policies, and processes related to residential construction management. Topics of focus include the economics of the residential construction market, land use, residential company management, and current industry topics

CSM 6400 Principles of Roofing from Design to Installation and Beyond

A descriptive study of roof construction, focusing on the nomenclature, building materials, estimating, safety, technology and the assembly of different roofing systems.

CSM 6550 - Reducing Adversarial Relations in Construction

Focuses on the study of the delivery of projects and how adversarial relations can affect the successful completion of the venture. Topics include management of human resources, understanding the needs and processes of the participants, where problems lie, methods of avoiding and settling disputes. Preq: Construction Science and Management or Architecture major, and senior standing; or consent of department chair.

CSM 8330 - Fundamentals of Integrated Project Delivery Systems

Reviews the major project delivery systems using a studio format. Students describe, analyze and select the most appropriate delivery system for a specific project. Integrated Project Delivery is examined as a project delivery method, with a focus on essential concepts, characteristics, differences, advantages, and disadvantages.

CSM (ARCH) 8350 - Integrated Project Delivery Case Studies

Students examine case studies to understand how Integrated Project Delivery is put into practice; analyze RFQs, RFPs, contracts, management methods, and techniques used in Integrated Project Delivery; and suggest appropriate improvements to the projects in order to promote more effective teamwork.

CSM (ARCH) 8360 - Managing Integrated Project Delivery

Students research, analyze and select various design and construction management processes related to Integrated Project Delivery; and learn to set project goals, develop ethical guidelines and use new technologies to develop collaborative work environments implementing client-oriented design and construction services.

CSM 8520 CONSTRUCTION MANAGEMENT RESEARCH

Research methodology applied to the construction industry. The course objective is to learn the basic skills and knowledge associated with formal business research.

CSM 8600 FINANCIAL PLANNING & ANALYSIS

Theory of financial management as it relates to the financial challenges faced by the building construction firm. This course illustrates the special nature of the structure, management and control of the construction firm.

CSM 8610 CONSTRUCTION CONTROL SYSTEMS

The development and analysis of cost, resource and quality control programs for a company's construction projects. The objective is to examine the responsibilities of the project management team in both the traditional and construction management systems for delivery of the typical medium to large commercial/industrial building project. The case study method is augmented by lectures presented by a number of professional constructors. Prerequisite: Estimating, scheduling and project management fundamentals.

CSM 8620 PERSONNEL MANAGEMENT & NEGOTIATIONS

The role of management and unions in the construction industry. Topics include contract negotiation, collective bargaining, dispute resolution and management for productivity improvement. The need to improve productivity in the construction industry is well documented, and effective personnel management is the most important factor in reaching the goal of improved productivity. The course examines the whole field of personnel management in construction and the ways in which productivity may be improved. Prerequisite: Permission of the instructor.

CSM 8630 ADVANCED PLANNING AND SCHEDULING

Analysis and control of construction projects using advanced techniques for planning, scheduling and resources control. This course helps students develop advanced skills in scheduling building construction projects. Prerequisite: Permission of the instructor.

CSM 8640 BUSINESS STRATEGY AND MARKETING

Advanced techniques for business strategy and marketing of construction management, design-build or single-contract project delivery services and companies. The course helps students develop skills in cost analysis and the marketing of construction project delivery beyond the basic level usually associated with undergraduate courses in estimating and quantity survey. Prerequisite: Permission of the instructor.

CSM 8650 PROJECT MANAGEMENT

Theory of project management and control with special emphasis on the role and

responsibilities of the resident project representative and the project manager. Students will develop an understanding and professional competence regarding the authority and responsibility of the resident project representative in the effective administration of the building construction project. Prerequisite: Permission of the instructor.

CSM 8660 - Contractor Role in Development

Addresses the various roles and responsibilities of the contractor in development including discussion of the owner/designer/constructor relationship.

CSM 8670 - Green Building Delivery

Explores the change in thinking and practice of delivering projects as a result of green building. The essential components of sustainable building are defined and common practices of green building are explored. Green rating systems are taught with a focus on the U.S. Green Building Council's LEED (Leadership in Energy and Environmental Design) label. Preq: Consent of instructor.

CSM 8680 - Emerging Technologies in the Built Environment

Explores the different emerging technologies currently a part of the industries related to the built environment, and analyzes business processes to determine feasible technology reforms that can help improve a company's workflow. Preq: Consent of instructor.

CSM 8690 Advanced Drone Mapping and Modeling

Exploration of data capture and analysis methods from small unmanned aircraft systems (sUAS) to support high quality 3D models and surveys. Students enrolled in the course will take the FAA Part 107 exam and earn their remote pilots' certificate. Drone flight skills will primarily be taught through computer simulation software and a one day onsite training session. Course will focus on processing data using software to create various digital outputs. This course is interdisciplinary in nature and well suited for students interested in construction, architecture, civil engineering, communication, real-estate, surveying, photography, law enforcement, wildlife and agriculture.

CSM 8810 - Professional Seminar

New and emerging methods for management of the construction or construction-related firm. Preq: Consent of instructor.

CSM 8900 - Directed Studies

Special topics not covered in other courses. Emphasis is on field studies, research activities and current developments in building science. Preq: Consent of instructor.

CSM 8910 MASTER'S THESIS RESEARCH

With the approval of his or her advisory committee, the student conducts independent research and analysis. The thesis is presented orally and in writing and in strict compliance with the guidelines of Clemson's Graduate School. Research and analysis of a specific approved subject relating to construction management such as "The Selection of the Most Effective Manner of Managing the Construction of High-Rise

Construction."

Appendix B - Faculty and Staff Listing

Ms. Deborah Anthony, Administrative Assistant
Office: 2-122 Lee Hall
Office Phone: 864-656-0181
E-Mail: adebora@clemson.edu

Dr. Dennis Bausman, Professor and Endowed Faculty Chair
Office: 2-133 Lee Hall
Office Phone: 864-656-3919
E-Mail: dennisb@clemson.edu

Dr. Joseph Burgett, Associate Professor and Endowed Professor
Office: 2-134 Lee Hall
Office Phone: 864-656-6739
E-Mail: jmburg@clemson.edu

Dr. Shima Clarke, Professor and Associate Chair
Office: 2-131 Lee Hall
Office Phone: 864-656-4498
E-Mail: shimac@clemson.edu

Dr. Dhaval Gajjar, Assistant Professor
Office: 2-137 Lee Hall
Office Phone: 480-332-6674
E-Mail: dgajjar@clemson.edu

Dr. Mike Jackson, Professor and Chair
Office: 2-123 Lee Hall
Office Phone: 864-656-0181
E-Mail: nmjacks@clemson.edu

Dr. Jason Lucas, Associate Professor
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E-Mail: jlucas2@clemson.edu

Dr. Ehsan Mousavi, Assistant Professor
Office: 2-132 Lee Hall
Office Phone: 864-656-7473
E-Mail: mousavi@clemson.edu

Dr. Vivek Sharma, Assistant Professor
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Office Phone: 864-656-3885
E-Mail: viveks@clemson.edu

Appendix C - Support Services

Grievance policy and ombudsman information

It is the policy of the Graduate School to address all grievances of an academic nature filed by enrolled graduate students. Graduate student grievances are heard by the Graduate Academic Grievance Committee (GAGC). The GAGC typically consists of three faculty representatives from each of the five colleges and one graduate student representative from each college. A six-member Initial Grievance Review Board (IGRB) is formed from among GAGC members and is responsible for determining which grievances will go forward to the GAGC.

Procedure

Grievances must be filed with the Graduate School within 60 days of the alleged act and may involve the following: violations of program, department, college or Graduate School policies related to final grades in courses or research (891 or 991); violations of program, department, college or Graduate School policies related to the completion of any academic requirement including theses and dissertations, and oral or written comprehensive examinations; and graduate student assistantship employment including offers of assistantship appointments made during recruiting not honored after enrollment.

At any time prior to filing a grievance, the student may consult with the University ombudsman charged with mediation in cases involving graduate students.

Any student wishing to file a complaint must first make every attempt to resolve it within the college. The student must first take the complaint to the faculty or staff member(s) involved. If no resolution can be reached, the student should request assistance from the department chair and the dean of the college.

If the grievance remains unresolved, the student may file the complaint with the Graduate School. The student must first meet with the associate dean of the Graduate School charged with oversight of the GAGC. The associate dean will describe the grievance process to the student. If the student wishes to proceed with the grievance, the associate dean will provide the student with Graduate School Form GSg-A, "Request to File a Grievance," which will enable the student to provide a written statement detailing the issue and his or her attempts to resolve it at the college level by documenting a) the dates of consultations at the college level, b) the names of those persons consulted, and c) the signature of the collegiate dean attesting that no resolution could be reached. The student must return the fully executed Form GSg-A to the Graduate School within 30 days of receipt from the associate dean. Students who fail to file the grievance within this timeframe forfeit their opportunity to proceed.

The student may seek external counsel (an advisor, an attorney, etc.) to assist with preparation of materials to submit to the GAGC. The student may request such individual accompany him or her to the hearing and may wish to proceed to prepare for this event. Questions concerning possible impacts on the student's graduate status

should he or she not be successful in the grievance may be discussed at this time with the associate dean of the Graduate School.

The IGRB will determine if the complaint, as submitted on Form GSg-A constitutes a grievance under the Graduate School's policies. Grievable complaints will be addressed by a subcommittee of the GAGC appointed for the purpose of addressing the complaint in question. The subcommittee will convene an informal, closed hearing to recommend a resolution to the grievance. For more information about the procedures, refer to the *Graduate School Announcements* at www.registrar.clemson.edu/html/catalogGrad.htm.

University ombudsman

The ombudsman is an independent, confidential resource that provides assistance to faculty, graduate students and post-doctoral students in resolving problems, complaints and conflicts when normal processes and procedures have not worked satisfactorily. The Ombudsman's Office serves as a central information source on policies, procedures and regulations affecting faculty, graduate students and post-docs. The office refers individuals to persons able to resolve problems or handle appeals at the lowest possible level. Where appropriate, the ombudsman can facilitate and/or mediate communication between parties who find themselves in a dispute.

The ombudsman strives to ensure that faculty, graduate students and post-docs receive fair and equitable treatment within the University system. He provides an independent point of view in an informal and confidential environment. The ombudsman will not identify you or discuss your personal concerns with anyone without your permission. Private confidential meetings can be arranged at your convenience. All communications will be treated with strict confidentiality. The ombudsman works toward resolutions based on principles of fairness. He is neither an advocate for faculty, administration or students, nor an agent of the University, but is an advocate of fair processes.

The Office of the Ombudsman provides fair and impartial counseling to faculty members, graduate students and post-docs by: 1) addressing problems and concerns, and identifying and evaluating options to reach resolutions; 2) providing available resources within the University, particularly as to policies and procedures; 3) serving as a neutral party in conflict resolution; 4) opening lines of communication through mediation; and 5) recommending changes in University policies and procedures when necessary. The ombudsman assists in issues of harassment, academics, unfair or inequitable treatment, or any other University policy that you feel has been applied unfairly or erroneously.

The ombudsman, as a designated neutral, has the responsibility of maintaining strict confidentiality concerning matters that are brought to his attention unless given permission to do otherwise. The only exceptions, at the sole discretion of the ombudsman, are where there appears to be imminent threat of serious harm. The ombudsman must take all reasonable steps to protect any records and files pertaining to confidential discussions from inspection by all other persons, including management.

The ombudsman will not testify in any formal judicial or administrative hearing about concerns brought to his attention. When making recommendations, the ombudsman has the responsibility to suggest actions or policies that will be equitable to all parties.

Concerns can be directed to the University Ombudsman by letter, walk-in, appointment or telephone: 101 Clemson House; telephone (864) 656-4353 or (864) 656-4957; email ombudsman@clemson.edu.

Counseling Services

The demands of graduate school can sometimes seem overwhelming. If you feel you could benefit from talking to a counselor — about grad school stress or any other issue — you may be eligible to receive services from the Counseling and Psychological Services program (CAPS), located in Redfern Health Center. To learn about their current programs, visit the CAPS website at staff.clemson.edu/redfern/caps or call them at (864) 656-2451.