Graduate Student Manual

Mechanical Engineering Department

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1 Introduction

1.1 Purpose of this Handbook

This document is intended to familiarize you, as a graduate student in the Mechanical Engineering Department, with the requirements, policies, and procedures relevant to your graduate experience. The rules and regulations in this manual govern our academic programs and describe the duties and responsibilities of graduate students in the department. Graduate students should become familiar with the information presented here and with general Graduate School requirements outlined in the policies and procedures outlined in the Graduate School Policies and Procedures Handbook. Suppose the answer to a question cannot be obtained from this manual or the Graduate Student Announcements. In that case, the answer should be sought by asking: the ME Graduate Student Services Coordinator, the ME Graduate Program Coordinator, or the Graduate School, preferably in that order.

Students must read this manual and return a signed copy of Form 15 (see Appendix) to the Graduate Student Services Coordinator. Signing this form indicates that the Graduate Manual has been read in its entirety by the student.

1.2 Contact Information

The ME Graduate Student Services Coordinator is the initial contact for graduate students arriving on campus. The ME Graduate Student Services Coordinator and the ME Graduate Program Coordinator are the authorities on regulations and procedures pertinent to ME graduate programs. They should be contacted whenever questions or problems occur. In addition to the Graduate Program Coordinator and the Graduate Student Services Coordinator, graduate students within the department may also need to work with the following ME representatives.

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>Email</th>
<th>Office</th>
<th>Office Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grad. Program Coordinator</td>
<td>Dr. Huijuan Zhao</td>
<td><a href="mailto:hzhao2@clemson.edu">hzhao2@clemson.edu</a></td>
<td>201 EIB</td>
<td>864-656-7190</td>
</tr>
<tr>
<td>Grad. Program Student Services Coordinator</td>
<td>Irina Kharitonova</td>
<td><a href="mailto:ikharit@clemson.edu">ikharit@clemson.edu</a></td>
<td>102A EIB</td>
<td>864-656-0999</td>
</tr>
<tr>
<td>ME Payroll Representative</td>
<td>Daune Raines</td>
<td><a href="mailto:drains@clemson.edu">drains@clemson.edu</a></td>
<td>100 EIB</td>
<td>864-656-9805</td>
</tr>
<tr>
<td>ME Travel/Purchasing Representative</td>
<td>Jessica Lang</td>
<td><a href="mailto:jllang@clemson.edu">jllang@clemson.edu</a></td>
<td>207 EIB</td>
<td>864-656-8949</td>
</tr>
<tr>
<td>ME Room Reservation Coordinator</td>
<td>Kathleen Grant</td>
<td><a href="mailto:grant5@clemson.edu">grant5@clemson.edu</a></td>
<td>106 EIB</td>
<td>864-656-2482</td>
</tr>
</tbody>
</table>

2 Application, Admission, and Enrollment

2.1 Application Process

All graduate program applications must be submitted via the Graduate School application portal. Mechanical Engineering Department has the following graduate programs.

- Master of Science (M.S.) Degree Programs. It includes three options: (1) M.S. thesis option; (2) M.S. non-thesis option; and (3) M.S. non-thesis industrial track option. Applicants who have already received or are expecting to receive MS degree in Mechanical Engineering cannot apply for a duplicate degree, even if the structure of their program may be different.
- Doctor of Philosophy (Ph.D.) Degree Programs. Applicants can apply with/without a M.S. degree in Mechanical Engineering.
• Graduate Certificate Programs. Mechanical Engineering Department offers three graduate certificate programs. Please read Graduate Certificate Programs for more details.

Applicants should apply to the Mechanical Engineering Programs starting from a regular semester (Fall semester and Spring semester) unless exceptional circumstances apply. All international applicants should apply to the Mechanical Engineering Programs on the main campus (also known as Clemson Campus).

2.2 Admission Requirements

Mechanical Engineering Department follows the general admission requirements listed at Clemson University Graduate School Policies and Procedures.

Admission into the Program does not guarantee financial funding. Please read Financial Information for more details.

2.3 Special Applicant Categories

The online application for all following special applicant categories uses the same online application portal as typical applications.

• Graduate Non-degree Program
Non-degree-seeking applicants may become candidates for graduate degrees by first applying to, and being admitted into, a degree program. Taking courses as a non-degree-seeking student does not provide a guarantee to the student that they will be accepted into a degree program.

• Combined Bachelor’s/Master’s (BS/MS) Program
Mechanical Engineering undergraduates at Clemson University may begin their Master of Science (M.S.) degree program in Mechanical Engineering while completing their Bachelor of Science (B.S.) degree and use a limited number of courses to satisfy the requirements of both their degrees. The following are required:

• Undergraduates must have an overall GPA of 3.4 or better and must have completed their junior year courses prior to taking graduate courses for the BS/MS program. Students who meet these requirements may apply for the BS/MS program by submitting a GS6-Bachelor-to-Graduate form to their undergraduate advisor during registration.
• Up to 12 credit hours from any 6000-8000 level courses may be used to satisfy the requirements of their B.S. degree and can be used for their M.S. degree.
• Students should consult with their undergraduate academic advisor before selecting graduate-level courses. Students in the BS/MS program are conditionally accepted to the master's program until their BS degree requirements are completed.

2.4 New Student Orientation

All new graduate students are recommended to attend Graduate School Orientation and are mandatory required to attend orientations held by the Mechanical Engineering Department to acquaint themselves with the instructional and research activities of the department as well as with general regulations. Information from these orientations will help the student select a more specific research area and allow them to choose their advisory committee members more responsibly.

2.5 Major Advisor

Doctoral students and thesis master's students have their research advisor as the major advisor. Thesis master's students who have not yet identified a research advisor will be initially designated as non-thesis
master's students for the first semester. All the graduate students without a research advisor will have the Graduate Program Coordinator as their major advisor.

Please check the Advisory Committee for more information.

2.6 Course Registration

Course registration should be done with guidance from your research advisor if you have one. Otherwise, course registration should be based on the area of interest and the Degree Program Requirements. The recommended course load for a non-thesis master's student in their first semester is four. International graduate students should register for a minimum of 9 credits to remain the full-time student status. More information on how to register for courses can be found on the Registration Portal. Students are expected to make continuous progress toward their degrees and, therefore, to be enrolled for graduate credits each semester during the academic year until requirements are completed. Only the courses satisfying the degree program requirements will be listed in the GS2 Plan of Study form for approval.

2.7 GS2 Plan of Study

The Form GS2 Plan of Study represents a contract between the student, the major advisor, and the University. The Graduate School will use the GS2 Plan of Study to determine whether the student has met the graduation requirements when applying for a degree. The GS2 forms are reviewed and approved by the Graduate Student Services Coordinator, all the Advisory Committee members, the Graduate Program Coordinator, and the Department Chair. Any deviation from courses listed on the student's most recent GS2 form must be approved by the student's major advisor, and a revised GS2 must be submitted and approved. Requests for changes in the GS2 Plan of Study must be processed before the requested change occurs. Final GS2 Plan for Study must be on file in the Enrolled Student Services Office prior to the graduation application deadline.

There are the important timelines associated with GS2 form in Mechanical Engineering Department:

- **Before classes start in the second semester**, master's students should submit the GS2 Plan of Study for approval with the consultation of the major advisor. This deadline is prior to the deadline required by the Graduate School.
- **Before classes start in the fourth semester**, doctoral students should submit the GS2 Plan of Study for approval with the consultation of the research advisor.
- **At the beginning of the final semester**, students should submit the final GS2 Plan of Study for approval. Information on submitting the GS2 form can be found on the Graduate School Website.

Students who do not properly file the GS2 form may risk failing to receive proper advice from their major advisor and may face undue difficulties, including fines or delays in graduating.

2.8 Username and TigerOne Card

You will be assigned a Clemson University computer user identification (CUID) upon acceptance. This is a permanent, unique identifier for you to access the Clemson computer network. It is also referred to as your "username" or "USERID". More information on usernames can be found on the CCIT webpage.

Students are advised to get their TigerOne card as soon as possible after arriving on campus. The TigerOne Card is your official Clemson University photo ID card and gives you access to various services throughout campus and around town. Information on obtaining your TigerOne Card is available on the TigerOne webpage.
2.9 Policy on intellectual property

All computer programs written, data generated, discoveries made, derivations developed, etc., by a Clemson graduate student are the property of Clemson University, not of the student. Clemson University and the Mechanical Engineering Department retain full ownership rights to any inventions, discoveries, developments and/or improvements, whether 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 the Graduate School curriculum.

You will retain copyright ownership of your thesis/dissertation. However, the Mechanical Engineering Department will maintain the right to publish research. 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 research students should keep a formal notebook for recording research procedures and results. All data, research notebooks and related materials, such as slides, pictures, graphs, or publication reprints, generated by any graduate student within the department are the department's property 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 these materials.

3 Academics

3.1 Summary of Degree Requirement

Students in ME degree-seeking programs must complete the requirements summarized in Table 2.

<table>
<thead>
<tr>
<th>Degree Programs/Options</th>
<th>M.S. thesis</th>
<th>M.S. Non-thesis</th>
<th>Ph.D. without M.S.</th>
<th>Ph.D. with M.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum total credit hours</td>
<td>30</td>
<td>33</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>ME core courses required</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Minimum ME course credit hours</td>
<td>12</td>
<td>18</td>
<td>18</td>
<td>6</td>
</tr>
<tr>
<td>Minimum ME courses</td>
<td>4</td>
<td>6</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Minimum letter-graded credit hours*</td>
<td>24</td>
<td>33</td>
<td>33</td>
<td>12</td>
</tr>
<tr>
<td>Minimum research credit hours</td>
<td>6</td>
<td>None</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>Qualifying exam required</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Defense required</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*At least half of all the courses must be 8000-level and above. At least half of ME courses must be 8000-level and above. All the courses listed on GS2 form must be approved to fulfill the graduation requirement. Please see the [GS2 Plan of Study](#) for more details.

The degree requirements in Table 2 are derived from the following guidelines:

- At least half of the letter-graded courses applied to any ME degree must be 8000-level and above.
- At least half of the courses applied to any ME degree program must have the ME subject code.
- At least half of the ME courses applied to any ME degree program must be 8000-level and above.
- ME core course requirements must be met. Please refer to [Core Courses](#) for more detail.
• Only STEM courses offered by College of Engineering, Computing and Applied Sciences and College of Science will fulfill the elective courses requirement toward an M.S. non-thesis graduate degree in Mechanical Engineering.

3.1.1 Core Courses

Degree-seeking master's students and Ph.D. students not holding a M.S. degree in Mechanical Engineering from another institution are required to satisfy the departmental core course requirements.

There are four "Subject Area Groups" for the purpose of defining core course requirements: Design and Manufacturing (DM), Dynamical Systems and Controls (DSC), Engineering Mechanics (EM), and Thermal and Fluid Sciences (TFS). Typically, research students align with their major advisor's subject area group. Students are not required to declare their subject area group, and the subject area chosen by the student does not appear on the student's transcript, GS2 or diploma. It is an internal requirement for ME graduate students to ensure they achieve a depth of knowledge in a subject area.

- Students in the DM, DSC, and EM groups must complete at least three department core courses listed in Table 3.
- Students in the TFS group must complete five core course requirements listed in Table 4.

**Table 3 Department Core Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME 8010</td>
<td>Foundations of Fluid Mechanics</td>
<td>ME 8200</td>
<td>Applied Optimal Control</td>
</tr>
<tr>
<td>ME 8100</td>
<td>Macroscopic Thermodynamics</td>
<td>ME 8200</td>
<td>Modern Control Engineering</td>
</tr>
<tr>
<td>ME 8310</td>
<td>Convective Heat Transfer</td>
<td>ME 8210</td>
<td>Advanced Control Engineering</td>
</tr>
<tr>
<td>ME 8180</td>
<td>Intro to Finite Element Analysis</td>
<td>ME 8460</td>
<td>Intermediate Dynamics</td>
</tr>
<tr>
<td>ME 8350</td>
<td>Continuum Mechanics</td>
<td>ME 8610</td>
<td>Materials Selection in Engineering Design</td>
</tr>
<tr>
<td>ME 8370</td>
<td>Theory of Elasticity I</td>
<td>ME 8700</td>
<td>Advanced Design Methodologies</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ME 8710</td>
<td>Engineering Optimization</td>
</tr>
</tbody>
</table>

**Table 4 TFS Core Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ME 8010</td>
<td>Foundations of Fluid Mechanics</td>
<td>MATH Elective</td>
<td>Any MATH 6000-level or above¹</td>
</tr>
<tr>
<td>ME 8100</td>
<td>Macroscopic Thermal Dynamics</td>
<td>PHYS 8110</td>
<td>Methods of Theoretical Physics I¹</td>
</tr>
<tr>
<td>ME 8310</td>
<td>Convective Heat Transfer</td>
<td>PHYS 8120</td>
<td>Methods of Theoretical Physics II¹</td>
</tr>
<tr>
<td>ME 8120</td>
<td>Experimental Methods in Thermal Science</td>
<td></td>
<td>Students must take one of the above listed three courses. Only one of these courses can be used to satisfy the fifth core course requirement.</td>
</tr>
</tbody>
</table>

All Ph.D. students, whether having an M.S. degree or not, must take a minimum of 12 credit hours of graduate-level coursework. Any changes to course requirements, such as waivers or substitutions, must be approved by the Department Chair. Requests should be made in a timely manner and should be pre-approved by the Department Chair. Courses taken prior to the request are subject to rejection by the Department Chair.
3.2 Advisory Committee

Students are expected to become familiar with the instructional and research activities within the department, particularly before the advisory committee selection. The advisory committee consists of an advisory committee chair and advisory committee members. The advisory committee chair is the major advisor of the student. The major advisor must be a regular tenured/tenure-track faculty member in the Mechanical Engineering Department.

- Major Advisor

The selection of the major advisor is one of the most important decisions a graduate student will face. Students are encouraged to meet with faculty within their research area to gain information.

1. If possible, M.S. thesis students and Ph.D. students should select a research advisor as their major advisor during the first semester of study.
2. Before identifying a major advisor, M.S. thesis students and Ph.D. students should contact the Graduate Program Coordinator to discuss course planning.
3. By default, the Graduate Program Coordinator will serve as the major advisor of all M.S. non-thesis students. Students can select an alternative major advisor with the approval of the Graduate Program Coordinator. M.S. non-thesis students have the option to change their advisory committee on rare and justifiable occasions. However, it is not advised.

The major advisor advises the student to plan the curriculum (GS2 Plan of Study). For M.S. thesis students and Ph.D. students, the major advisor guides the student's research activities, including preparing the thesis, dissertation, and special project report.

Under certain circumstances, a change of major advisor is allowed and should be approved by the current major advisor and the Graduate Program Coordinator. M.S. thesis students who intend to switch to M.S. non-thesis option must seek their major advisor's approval. Unless instructed otherwise by the major advisor, the advisory committee need not be changed.

- Advisory Committee

Each graduate student will have an advisory committee of mostly Mechanical Engineering faculty. The major advisor serves as the advisory committee chair and should be consulted before establishing the advisory committee.

1. Thesis master's students must have at least three faculty members in the advisory committee.
2. Doctoral students must have at least four faculty members in the advisory committee.
3. Non-thesis master's students have the Graduate Program Coordinator as the committee chair and the sole committee member. If non-thesis master's students select a regular faculty member as the major advisor (advisory committee chair), the Graduate Program Coordinator will serve as the advisory committee member.
4. In addition to the required number of committee members within the University, external committee members will be allowed if agreed upon by the committee members from within the University and approved by the Graduate Program Coordinator and Department Chair. A committee containing the required minimum number of Mechanical Engineering faculty within the University is formed first, and then they can vote to approve additional external members.

For M.S. student, the advisory committee must be appointed before registration for the second semester. For Ph.D. student, the advisory committee must be appointed before registration for the fourth semester. The graduate student is responsible for initiating the process and keeping them apprised of their progress.

After the advisory committee is formed, all committee members approved in this manner are voting members. The Advisory Committee will approve the curriculum (GS2 Plan of Study), supervise the
student's graduate study and research activities, administer the comprehensive and final examinations if required, and initiate the recommendation for awarding the degree.

### 3.3 Master of Science Degree Program

Within the Mechanical Engineering Department, the Master of Science (M.S.) degree program in mechanical engineering has three options: (a) the M.S. thesis option, (b) the M.S. non-thesis option, and (c) the M.S. non-thesis industrial track option. As of Spring 2018, the time limit to complete a M.S. degree from matriculation to graduation is six (6) calendar years.

#### 3.3.1 M.S. thesis Option

The M.S. thesis students are required to take both course credits and research credits. The course requirement for M.S. thesis option is listed in [section 3.1](#). The purposes of the M.S. thesis are to demonstrate the capability of the student to (1) formulate engineering problems within a research project; (2) utilize engineering knowledge relevant to a meaningful resolution of a specific problem; (3) effectively plan and carry out the work leading to the completion of the project; and (4) report (orally and in writing) the results of the project in concise, precise professional style. A general timeline for the M.S. thesis students is given in Table 5.

<table>
<thead>
<tr>
<th>When</th>
<th>What</th>
<th>How</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the first day of classes of the second semester</td>
<td><strong>Initial GS2 Committee Selection form submission</strong></td>
<td>Consultation with the major advisor, iRoar submission</td>
</tr>
<tr>
<td>Before the first day of classes of the second semester</td>
<td><strong>Initial GS2 Plan of Study form submission</strong></td>
<td>Consultation with major advisor, iRoar submission</td>
</tr>
<tr>
<td>At the beginning of the final semester, prior to the graduation application.*</td>
<td><strong>Final GS2 submission</strong></td>
<td>Student must resubmit online <strong>GS2 form</strong> in iRoar if different from initial GS2</td>
</tr>
<tr>
<td>By the end of the third/second week of the graduating semester. *</td>
<td>Graduation Application</td>
<td>Students must apply to graduate in iRoar</td>
</tr>
<tr>
<td>At least two weeks before the defense</td>
<td>Submission of draft thesis report</td>
<td>Student must circulate the complete thesis draft (approved by the major advisor) to the advisory committee.</td>
</tr>
<tr>
<td>At least ten business days prior to the defense (early room reservations recommended)</td>
<td>Schedule thesis defense (time/date/location)</td>
<td>Student schedules the thesis defense with room reservation in consultation with the major advisor and all committee members. (See Table 1)</td>
</tr>
<tr>
<td>At least ten business days prior to the defense</td>
<td>Report thesis presentation schedule to Graduate School</td>
<td>Student Submits <strong>Defense Form</strong> to Grad School</td>
</tr>
<tr>
<td>At least ten business days prior to the defense</td>
<td><strong>Scheduled Defense Announcement</strong></td>
<td>Student emails Graduate Student Services Coordinator with abstract, title, advisory committee members, program, date, time and location.</td>
</tr>
</tbody>
</table>
At least two weeks prior to the GS7 submission deadline.*

Thesis Presentation and Defense

After the examination, Form GS7M is signed by all the advisory committees.

Please refer to the Graduation Deadlines page*

GS7M Form Submission

Student must submit the signed GS7M Form to the Graduate Student Services Office and Enrolled Student Services Office. (See GS7M form for more detail)

Please refer to the Graduation Deadlines page*

Thesis Approval by Manuscript Review Office

Student must submit completed thesis electronically for format approval from Manuscript Review Office. Upon submission, students can make only formatting revisions requested by the Manuscript Review Office

Before leaving campus

Return Keys, Complete Check-Out Form and Exit Survey

Student must file Check-Out Form signed by the research advisor and complete the exit survey sent by ME Graduate Program Student Services Coordinator.

* https://www.clemson.edu/graduate/students/deadlines.html

3.3.2 M.S. non-Thesis Option

The M.S. non-thesis student must complete at least 33 hours of coursework with flexibility to select up to 5 electives from any CECAS departments, following the guideline in section 3.1. A general timeline for the M.S. non-thesis students is given in Table 6.

Table 6 Milestones for M.S. Non-thesis Degree Program

<table>
<thead>
<tr>
<th>When</th>
<th>What</th>
<th>How</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the first day of classes of the second semester</td>
<td>Initial GS2 Committee Selection form submission</td>
<td>Consultation with the major advisor, iRoar submission</td>
</tr>
<tr>
<td>Before the first day of classes of the second semester</td>
<td>Initial GS2 Plan of Study form submission</td>
<td>Consultation with major advisor, iRoar submission</td>
</tr>
<tr>
<td>At the beginning of the final semester, prior to the graduation application. *</td>
<td>Final GS2 submission</td>
<td>Student must resubmit online GS2 form in iRoar if different from initial GS2</td>
</tr>
<tr>
<td>By the end of the third/second week of the graduating semester. *</td>
<td>Graduation Application</td>
<td>Student must apply to graduate in iRoar</td>
</tr>
<tr>
<td>Before leaving campus</td>
<td>Complete Check-Out Form and Exit Survey</td>
<td>Student must file Check-Out Form to ME Grad Student Services Coordinator and complete the exit survey online upon receiving an email with the link from Graduate Student Services Coordinator</td>
</tr>
</tbody>
</table>

* https://www.clemson.edu/graduate/students/deadlines.html

Mechanical Engineering students enrolled in the M.S. non-thesis option should check the box on the GS2 form labeled "MS non-thesis no GS-7 required". Students completing all the approved courses listed on GS2 with a minimum GPA of 3.0 meet the requirements for graduation candidacy.
3.3.3 M.S. non-thesis Industrial Track Option

The required zero-credit internship course in the third regular semester distinguishes the M.S. non-thesis industry track option from the traditional M.S. non-thesis option. This program allows domestic and international students to intern full-time for up to 8 months – all in less than 2 years without delay of graduation. When eligible, students can apply for an internship in any state of the country and abroad in their third regular semester. By participating in this option, students will develop valuable industry connections and experience while obtaining advanced technical, theoretical, and applied knowledge to solve complex problems.

- Participation criteria: Students must complete 21 credit hours of coursework within the first two regular semesters (might include the summer semester). Students hold an accumulated GPA of 3.0 and above before participating in an approved internship in the third regular semester.
- M.S. non-thesis industrial track program requires the registration of zero credit INT8010-004 in the student’s third regular semester.
- Students can take advantage of the optional summer internship, increasing their full-time internship experience up to 8 months (summer semester + Fall semester, or Spring semester + summer semester
- Students will submit M.S. non-thesis industrial track interest form before the beginning of the second regular semester to declare the intention to participate in the M.S. non-thesis industrial track option.

Students who submit the intention form but cannot secure an internship in the third regular semester will automatically resume their graduate study in the traditional M.S. non-thesis option. The M.S. non-thesis industry track option is uniquely developed to maximize the industrial experience of international students without violating any immigration policy. To find an internship, students are encouraged to participate in job fairs, workshops, and networking events. Please refer to Internships for more information.

3.3.4 Change to Ph.D. Program

Students enrolled in the M.S. program can apply to transfer to the Ph.D. program before their fifth semester at the latest, using the GS-14 form "Request for Change of Degree and/or Major". The GS-14 form requires the consent of their major advisor and the Graduate Program Coordinator. Students changing their status from MS to Ph.D. must take the Ph.D. qualifying exam within one calendar year of filing for a change of status and before their fifth semester (Fall/Spring) enrollment as a graduate student. In their fifth semester or later in the program, M.S. students interested in a Ph.D. must graduate from Clemson University with an M.S. degree in Mechanical Engineering and submit an online application form for the Ph.D. program in Mechanical Engineering Department.

3.4 Ph.D. Program

3.4.1 Ph.D. Qualifying Examination

Purpose and Scope: The purpose of the Ph.D. qualifying examination is to: (1) provide students with an opportunity to review core disciplines in mechanical engineering and, optionally, in research related areas (approximately 75% at the undergraduate level and 25% at the graduate level); (2) provide an assessment as to whether students possess attributes of a doctoral candidate by demonstrating understanding of and the ability to apply fundamental principles; and (3) evaluate a student's potential for satisfactorily completing the doctoral program.

Exam selection and scheduling: Qualifying exams are taken after admission into the Mechanical Engineering Ph.D. program. Full-time Ph.D. students holding a M.S. degree in the mechanical engineering-related area must take three exams before the second regular semester (Fall/Spring). Full-time Ph.D. students without M.S. degree (also known as direct Ph.D. students) must take three exams before the third
regular semester (Fall/Spring). Part-time Ph.D. students must take three exams before the start of their fourth semester. If a student changes from M.S. program to Ph.D. program, they must take the exam within one calendar year of filing for the change of status and before the fifth semester (Fall/Spring). In extenuating circumstances, the student's major advisor may request that the student be granted a one-semester delay in taking the qualifying exams. Such requests are expected to be rare. Such circumstances include backgrounds in fields significantly different from mechanical engineering and significant medical or personal problems. Requests should be made in writing and submitted to the Graduate and Research Committee for approval.

With the approval of the student's major advisor and/or advisory committee, students must select three exam topics, at least two of which must be chosen from Table 7. Students may choose a third subject related to their area of specialization from another CECAS department. Each exam will be written and last no more than two hours. Before classes begin, the exams will be scheduled in the morning and the afternoon on Monday and Tuesday of the first week of the Fall and Spring semesters.

### Table 7 Qualifying Exam Topics by Subject Area

<table>
<thead>
<tr>
<th>DM</th>
<th>DSC</th>
<th>EM</th>
<th>TFS</th>
<th>General ME</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Design</td>
<td>Dynamics and Vibrations</td>
<td>Solid Mechanics</td>
<td>Heat Transfer</td>
<td>Engineering Mathematics</td>
</tr>
<tr>
<td>Manufacturing Processes</td>
<td>Systems and Controls</td>
<td>Engineering Materials</td>
<td>Thermodynamics</td>
<td>Fluid Mechanics</td>
</tr>
</tbody>
</table>
semester that exams are offered. Switching to a different exam still constitutes a second attempt at the qualifying exam. Students must have passed all three exams by the semester following their first round of exams to continue in the program. Students who received an F grade on a second attempt on any examination will not be permitted to continue in the Ph.D. program.

**Appeals procedure:** The qualifying exam process provides re-examination mechanisms for students who fail one or two exams on their first attempt. Failure of three exams on the first attempt or one or more exams on the second attempt dictates that students may not continue in the Ph.D. program. It is the consensus of the faculty of the Mechanical Engineering Department that outcomes of the qualifying exam process will not be the subject of the appeal, except where it is the consensus view of a student's advisory committee that procedures set forth were not followed.

### 3.4.2 Ph.D. Comprehensive Examination

The comprehensive examination is given only at the recommendation of the student's advisory committee and after completing most of the required coursework. General requirements and the description of the Ph.D. Comprehensive Examination are given in the [Graduate Policies and Procedures Manual](#). Satisfactory completion of the comprehensive examination must occur no more than five semesters and at least twelve months prior to the date of graduation (as of Fall 2018, per ME departmental policy). In the Mechanical Engineering Department, the comprehensive examination may only be taken after an advisory committee has been selected, a graduate degree curriculum has been approved using Form GS2, and the Qualifying Examinations have been successfully completed.

The comprehensive examination must be passed by the end of the fifth semester in which student status is full-time, and a GS5 Form must be filed with the Graduate Student Services Coordinator. In extenuating circumstances, the major advisor may request a delay from the student's advisory committee for the student to take the exam during the sixth semester. A student's advisory committee may request that the comprehensive exam be taken earlier. Time begins when a student enrolls in the Ph.D. program. Students become Ph.D. candidates after they pass the Comprehensive exam and their GS5 form has been processed.

Grading of the first taking of the exam will be "Pass", "Fail", or "Marginal". A student who receives a "Fail" grade will be dismissed from the program. A student who receives a "Marginal" has one more chance to take and pass the comprehensive examination.

Advisory committees often direct that a student take the comprehensive examination after preparing or in conjunction with presenting the research proposal. The advisory committee determines the precise format and may be oral and/or written. The comprehensive examination typically focuses on the student's research area, but also may cover additional material to obtain objective evidence of an adequate intellectual mastery of major and minor specializations. The research proposal should be provided to the committee at least two weeks prior to the comprehensive examination presentation date. The student is responsible for scheduling their comprehensive examination, reserving a room and coordinating the time with the advisory committee.

### 3.4.3 Ph.D. Final Oral Examination

With the major advisor's approval, a student should complete a draft of the dissertation at least two weeks before the final oral examination date. The final dissertation draft approved by the major advisor must be circulated to all the advisory committee members no less than ten business days before the final oral examination. It is within the right of the committee member to refuse to meet without a two-week review period. The advisory committee chair will guide the Ph.D. candidate to schedule the final examination, which must be given no later than three/two weeks before the date on which the degree is to be conferred. The last date for the final examination is published in the [Graduation Deadlines](#).

The student must submit the dissertation title, abstract, date, time, and place along with committee members by email to the ME Graduate Student Services Coordinator at least two weeks before their defense.
Dissertation defense notices must be sent to ME graduate students, and faculty by the ME Graduate Student Services Coordinator at least ten working days before the defense.

3.4.4 Dissertation

All theses and dissertations shall be prepared in accordance with guidelines established by the Graduate School. This guide provides advice on preparing an acceptable and effective thesis or dissertation. You should consult this guide before beginning the writing phase of your graduate research. Pay attention to formatting requirements.

3.4.5 General Timeline for Ph.D. Degree Programs

A general timeline for the Ph.D. students is given in Table 8.

### Table 8 Checklist of Milestones for Ph.D. Program

<table>
<thead>
<tr>
<th>When</th>
<th>What</th>
<th>How</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before the first day of classes for the fourth semester</td>
<td>Initial GS2 Committee Selection form submission</td>
<td>Consultation with faculty major advisor, iRoar submission</td>
</tr>
<tr>
<td>Before the first day of classes for the fourth semester</td>
<td>Initial GS2 Plan of Study form submission</td>
<td>Consultation with the advisory committee, iRoar submission</td>
</tr>
<tr>
<td>One year prior to graduation</td>
<td>GS5 Form Submission</td>
<td>Student must submit signed GS-Research Approval and GS5D Form to the Graduate Student Services Office and/or Enrolled Student Services Office</td>
</tr>
<tr>
<td>At the beginning of the final semester, prior to the graduation application*</td>
<td>Final GS2 submission</td>
<td>Student must resubmit online GS2 form in iRoar if different from initial GS2</td>
</tr>
<tr>
<td>By the end of the third/second week of the semester in which the degree is expected*</td>
<td>Graduation Application</td>
<td>Student must apply to graduate in iRoar</td>
</tr>
<tr>
<td>At least two weeks before the defense</td>
<td>Submittal of the dissertation draft</td>
<td>Student must submit the final dissertation draft (approved by the major advisor) to the advisory committee</td>
</tr>
<tr>
<td>At least ten business days prior to defense (early room reservations recommended)</td>
<td>Establishing the time/date/location for the dissertation defense</td>
<td>In consultation with major advisor and all committee members, student schedules the thesis defense with a room reservation. (See Table 1)</td>
</tr>
<tr>
<td>At least ten business days prior to the defense</td>
<td>Report thesis presentation schedule to Graduate School</td>
<td>Student Submits Defense Form to Grad School</td>
</tr>
<tr>
<td>At least ten business days prior to the defense</td>
<td>Scheduled Defense Announcement</td>
<td>The student emails Graduate Student Services Coordinator with the abstract, title, advisory committee members, program, date, time, and location.</td>
</tr>
<tr>
<td>At least two weeks prior to the GS7 submission deadline*</td>
<td>Dissertation Presentation and Defense</td>
<td>After the examination, Form GS7D is signed by the advisory committee.</td>
</tr>
<tr>
<td>Please refer to the Graduation Deadlines page*</td>
<td>GS7D Form Submission</td>
<td>Student must submit signed GS7D form to the Graduate Student Services Office or Enrolled Student Services Office</td>
</tr>
</tbody>
</table>
Please refer to the Graduation Deadlines page*

Dissertation Approval by Manuscript Review Office

Upon submission, students can make only formatting revisions requested by the Manuscript Review Office

Before leaving campus

Return Keys, Complete Check-Out Form and Exit Survey

Student must file Check-Out Form signed by the major advisor and complete the exit survey sent by the ME Graduate Student Services Coordinator.

* https://www.clemson.edu/graduate/students/deadlines.html

3.4.6 Time Limit

The Graduate School restricts the maximum time allowed to obtain a graduate degree. Refer to the Graduate School's Handbook for updated policies and details.

Committees are encouraged to require courses other than those that directly support the dissertation defense. A minimum of 18 credit hours of doctoral research credit are required. If required, work in the minor field or fields typically comprises 12 to 24 hours in courses carrying graduate credits. The degree will generally be awarded when the advisory committees are satisfied that the research program is complete and that all other formal requirements have been met. The Graduate School has an eight-year limit, from the entrance to graduation, for Ph.D. students. Waivers can be requested for exceptional situations. Please refer to the Graduate School Policies & Procedures for more details.

3.4.7 Master's Degree en route to Ph.D. Degree

If students in direct Ph.D. program (without a M.S. degree) have completed or plan to complete all requirements for the master's degree in the same discipline, the students may apply a M.S. Degree en route towards their Ph.D. Degree. If qualified students are interested in this option, the students should contact Graduate Program Student Service Coordinator for guidance and fill out the GS2-14 form accordingly. The signed GS2-14 form is due to the Graduate School the semester prior to the semester in which this M.S. degree is to be conferred.

3.5 Graduate Certificate Programs

Graduate certificates are official credentials offered by Clemson University and approved by the South Carolina Commission on Higher Education in the same manner as all degree programs. Graduate certificates will be noted on official transcripts, and a written certificate will be given to the student upon completion of the requirements. With respect to the certificate program requirement, please refer to the Clemson University Graduate School Policies & Procedures for details.

Clemson University implements the Independence of Degrees rule except for the Dual Master's Degrees and Certificate Programs. If admitted to the graduate-level program at the Mechanical Engineering Department, students can utilize their credits previously earned for the certificate credentials in Mechanical Engineering towards their ME masters' or ME Ph.D. degree requirements. Please refer to the Clemson University Graduate School Policies & Procedures for details.

The Mechanical Engineering Department offers the following three graduate certificate programs designed to assist industry professionals and current students chart their career paths in the industry. Students and professionals can pursue certificates in advanced manufacturing processes, autonomous & robotic systems, and applied computational mechanical engineering. Students who prefer in-person learning or an online experience that fits their busy schedule can pursue their educational goals with a graduate certificate from the Mechanical Engineering department. Certificates may be completed in-person or 100% online. Students completing a certificate online have the option to participate in synchronous class sessions or view materials asynchronously.
3.5.1 Applied Computational Engineering Certificate

The Graduate Certificate in Applied Computational Mechanical Engineering is designed to prepare students for developing and applying modeling and simulation technologies to understand real-world physical/natural systems and solve complex engineering problems. The program will offer students experience with mathematical techniques for modeling complex physical systems; computational methods for simulation and analysis of solid, fluidic, and multi-physics systems; parallel programming and software development; and methods for engineering optimization. The Certificate in Applied Computational Mechanical Engineering will enable students to develop and apply modeling and simulation capabilities to solve complex engineering problems.

Students must complete three of the four courses listed below to receive the Applied Computational Engineering Certificate:

- ME 6560: Additive Manufacturing
- ME 6580: Fundamentals of Micro/Nano Fabrication
- ME 8750: Advanced Manufacturing Processes
- ME 8760: Laser-based Manufacturing and Materials Processing

3.5.2 Advanced Manufacturing Processes Certificate

Rapid transfer of advanced science and technology for manufacturing new products is essential to improve product performance and productivity, develop advanced machinery, and enable process innovation. In this certificate program, students will study the underlying theories, advanced technologies, and current industrial practices for advanced manufacturing processes. This online program includes virtual laboratory demonstrations and project-based design exercises focused on advanced manufacturing. Highlights include designing, analyzing, and developing a prototype using emerging manufacturing processes and systems through individual and group-based projects.

Students must complete four of the five courses listed below to receive the Advanced Manufacturing Processing Certificate:

- MATH 6600: Introduction to Numerical Analysis
- ME 6930: Selected Topics in Mechanical Engineering – Integrated Computational Materials Engineering
- ME 8180: Introduction to Finite Element Analysis
- ME 8190: Computational Methods in Thermal Sciences
- ME 8710: Engineering Optimization

3.5.3 Autonomous and Robotic Systems Certificate

This graduate certificate aims to provide a more focused industry-centric education beyond bachelor's degree in Autonomous & Robotic Systems. The advances in autonomous and robotic technologies over the past decade have transformed all industry sectors more fundamentally in terms of how the future engineered systems will be designed, manufactured, or serviced. With the increasing number of industrial and societal systems adopting autonomous and robotic technologies, autonomous systems will become an integral part of all engineered systems. Employers are therefore seeking workers with new skills from further afield to retain a competitive edge for their enterprises and expand their workforce productivity. It is predicted that there will be a vast talent pool shortage in automation technologies which could harm the growth of various industries. The current graduates from Mechanical and related engineering fields know fundamental science and engineering principles but lack the knowledge of its application in realistic industry problems. Also, there is no room in the current curriculum to give students the critical knowledge and training needed in autonomous systems and robotics for designing, manufacturing, programming, and troubleshooting such systems. The intended Graduate Certificate will provide an opportunity for working professionals seeking
to advance their career in autonomous systems and robotics without committing to an extensive long
duration master's degree program. Moreover, these certificates will be stackable as the department move
towards an online Master of Engineering program in ME in the near future.

Students must complete 12 credits from the courses listed below to receive the Autonomous & Robotic
Systems Certificate:

- ME 6170: Mechatronics
- ME 8930: Introduction to Autonomy & Human-Robot interactions
- ME 8930: Multibody Robot Dynamics
- ME 8230: Control Systems Engineering
- ME 8200: Modern Control Engineering
- ME 8210: Advanced Control Engineering
- ME 8220: Applied Optimal Control
- ME/ECE 8590: Intelligent Robotic Systems
- ME 8930: Advanced Estimation and Filtering

3.6 Non-degree Students

Graduate students in a non-degree program are not required to maintain continuous enrollment after initial
matriculation. Students can accrue a maximum of 12 credits in non-degree-seeking status. Suppose you, as
a non-degree-seeking student, subsequently matriculate into ME graduate degree program. In that case, that
department may — at its discretion — accept up to a maximum of 12 credit hours you earned as a non-
degree student to be applied towards the Clemson University ME graduate degree into which you are
subsequently admitted. Students will use the online GS2 Study Plan for the credit transfer procedure.

3.7 Graduation

Final GS2 and graduation: To be approved for graduation, your final GS2 must be filed by the deadline
listed on the graduation deadlines webpage. Failure to meet these deadlines may result in late fees and the
inability to graduate when desired.

Application to Graduate: Procedures regarding the formal graduate application are governed by the
Graduate School and published on the Graduation Deadlines page. A nominal diploma fee must be paid at
the time of application if mailing is required, and arrangements should be made for cap and gown rental.
Students can submit graduation applications via iRoar- Apply to Graduate. Students are advised to review
the Graduation Deadlines page to prepare for graduation.

Delay graduation: If the student cannot complete the requirements before the scheduled graduation, a new
Graduation Application must be completed and filed when the student is ready to graduate.

Late fee: A late fee will be assessed for a student whose Graduation Application is submitted after the
deadline dates specified in the Graduation Deadlines.

Students must be enrolled during the graduation semester. Suppose the student has questions about
graduation or is not sure what is required. In that case, the student should contact the Graduate Program
Student Service Coordinator and/or the Graduate Enrolled Service.

3.8 Post Graduation

When you leave the University due to graduation or any other reason, you must complete the following
tasks:

- Turn in all keys to departmental staff.
- Return all equipment and supplies to appropriate locations.
• Be sure that any portion of the laboratory and office you occupied is clean and ready for another occupant.
• Return all borrowed materials (books, journals, etc.) to their appropriate location.
• Inform the Graduate Student Services Coordinator that you are leaving and complete an exit interview.
• Complete the departmental Graduate Student Final Check-Out Form. No student will be cleared with the Graduate School until the complete check-out form.

3.9 Academic Related Activities

3.9.1 Student Responsibilities

The Mechanical Engineering Department expects each graduate student to approach their graduate study professionally. Each course typically requires ~10 hours per week, assistantships range from 10-20 hours per week, and research will require 20-30 hours per week. The student should clarify the specific expectations of the major advisor at the beginning of their program.

3.9.2 Seminar Series

The ME Graduate Student Council, the Mechanical Engineering Department, and several research groups sponsor seminars throughout the year. Seminar announcements will be made via email, Canvas, and website postings. All graduate students are invited and encouraged to attend as many seminars as possible.

Graduate Research Seminar is organized on a weekly basis and provides an opportunity for students to share their research with the Department. Students interested in presenting their research should contact Graduate Research Seminar Chair, Dr. Joshua Bostwick, at jbostwi@clemson.edu for more information.

3.9.3 Honors and Awards

Every year, the faculty of the Mechanical Engineering Department will have the opportunity to nominate graduate students for Department and College level graduate student awards. These nominations are due to the Scholarships, Honors and Awards (SHA) Committee early in the Spring semester. Students are encouraged to fill out the Graduate Student Information Survey at the beginning of Spring semester to be eligible for the award nomination. Students are encouraged to communicate with their major advisor for award nomination.

3.10 Academic Requirements and Policies

3.10.1 Maintaining Academic Standing

A graduate student must maintain a minimum average of B (GPA=3.0) for all courses. Suppose at any time you fail to satisfy this requirement. In that case, you will be automatically placed on probation for one semester, when you will not be eligible for financial aid/assistantship. The first time a student is placed on probation is referred to as level PR1. A student on level PR1 status must enroll in 9 credit hours of coursework the following semester and bring their GPA to 3.0 or higher. A student may be granted status PR2 for a second semester with a GPA lower than 3.0. During the Probationary Period, approvals of the student's major advisor and the Program Coordinator via Graduate Student Plan of Success (GSPS) form are required prior to registration. Decisions are based on the probability of academic recovery within Graduate School regulations. In addition, a failing grade (D or F) in a course in your major area may cause dismissal regardless of your overall average.

The awarding of an advanced degree does not merely attest to the 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.
3.10.2 Enrollment Limits

Maximum enrollment limits for graduate students refer to graduate and undergraduate credits combined. During the Summer sessions, if the six-week and three-week sessions run concurrently, the total credits are not permitted to exceed the maximum for the six-week session. Specific enrollment limits are defined in Table 9.

Table 9 Maximum Credit Hours of Graduate Student Enrollment

<table>
<thead>
<tr>
<th>Student Category</th>
<th>Semester</th>
<th>6-week session</th>
<th>3-week session</th>
<th>Full Summer (12 weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full-time students</td>
<td>15</td>
<td>6</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Graduate assistants (10 hours)</td>
<td>15</td>
<td>6</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Graduate assistants (11+ hours)</td>
<td>12</td>
<td>6</td>
<td>3</td>
<td>12</td>
</tr>
<tr>
<td>Full-time CU employees</td>
<td>9</td>
<td>6</td>
<td>3</td>
<td>6</td>
</tr>
</tbody>
</table>

Graduate students paid solely on an hourly basis are not classified as graduate assistants but are subject to the same limitation in credit loads. All requests for permission to exceed these limits must be requested by memo and approved by the Chair of the Mechanical Engineering Department and the Dean of Graduate School.

3.10.3 Adding and Dropping Courses

As a graduate student in the Mechanical Engineering Department, you are strongly encouraged to consult your major advisor before dropping any course you are enrolled in. 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.

**Add/Drop Period and Financial Adjustments:** There are three deadlines for dropping classes. The last day to drop without any financial responsibility (for students dropping below full-time), the last day to drop without any grade or record of enrollment, and the last day to drop with a W grade. To check on the last day to drop with no charge, students should refer to the Financial Adjustments page for deadlines related to tuition refunds. A deadline to drop without a record of enrollment in the class occurs at the end of the add/drop period and can be found in academic calendar. The third deadline occurs about ten weeks into the semester and is the last day to drop with a grade of "W". Students should be fully aware of the consequences of adding and dropping classes on their financial aid and academic progress. The decision to drop a course should be discussed with academic advisor and/or financial aid advisor as needed.

3.10.4 Withdrawing from the Program/University

If, for any reason, you decide to withdraw from the program, inform your major advisor, then the Graduate Program Coordinator, who will inform you of the procedures to be followed to withdraw from the University officially. Failure to follow the procedures may result in your owing tuition and other fees to the University. This policy applies to both domestic and international students. W grade does not affect a student's overall GPA and their academic standing.

3.11 Academic Integrity

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 Mechanical Engineering 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 always be careful in our recordkeeping and diligent in our efforts to attribute credit where it belongs.
We must guard against any activity that would bring the integrity of the department or the individuals within it into question. Activities to be avoided include, but are not limited to, falsification of data, plagiarism, and misappropriation of others’ ideas. Definitions relevant to departmental and university integrity policies are included in this section.

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 is responsible for protecting this process and responding appropriately and expeditiously to charges of academic misconduct.

For a complete policy text, including rules and procedures and specifics related to former students, academic research and revocation of academic degrees, see the "Violation of Academic Integrity" section of the Graduate School Policies and Procedures Manual.

Definitions, explanations, and examples of violations of academic integrity

Violations of academic integrity may include but are not limited to, the following.

- **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 digital logins and 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 internet, and other sources when instructed to work alone.

- **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 (e.g., telephone interviews).

- **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.)

- **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.

- **Plagiarizing**: Plagiarizing is the 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 acknowledgment or permission or citing a source within the text but then directly quoting the materials without the use of quotation marks or text indentation.

- **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 that 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.

Levels of Seriousness of Violation
At the graduate level, students are expected to exhibit sophistication in understanding the tenets of academic integrity. Even so, some types of violations are more severe than others, and some 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 the 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 also result in more severe sanctions.

For more details, please refer to the Violation of Academic Integrity in the Graduate School Policies and Procedures Handbook.

**Reporting Procedures**

It is the responsibility of every member of Clemson University 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 business 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 Graduate Academic Integrity Committee. 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, please refer to the Violation of Academic Integrity in the Graduate School Policies and Procedures Handbook for more details.

### 3.12 Departmental Policy on Ethics

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 Mechanical Engineering 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 always to attribute credit where it belongs. We must guard against any activity that would bring the integrity of the department or the individuals within it into question. Among the activities to be avoided are:

- Falsification of data: ranging from fabrication to deceptively selective reporting of results or methods, including the purposeful omission of conflicting data with the intent to falsify results.
- Plagiarism: representation of another's work as one's own.
- Misappropriation of others' ideas: the unauthorized use of privileged information, however, obtained.
4 Financial Information

4.1 South Carolina Residency

The Office of Residency Classification handles all the information regarding domicile requirements for residency status. Questions should be addressed to the Office of Residency Classification at G-01 Sikes Hall, (864) 656-2280.

4.2 Tuition and Fees

For current tuition and fees, please refer to the Financial Aid website. General payment plan information can also be found on the Student Financial Services website. Graduate assistants will receive an email from Student Billing Questions with instructions for you to sign up for a payment plan online via iRoar. This should be accomplished before tuition is due. Your payments will be deducted from the first five full paychecks of the semester to pay their Graduate Assistant Fee. For more information about academic costs, financial aid and making payments, contact the Office of Student Financial Aid (located at G-01 Sikes Hall) or Student Financial Services (located at G-08 Sikes Hall).

4.3 Funding Opportunities

Financial support in the form of graduate assistantships is awarded based on the availability of funds, student's academic merit and academic performance. Graduate students must meet the following criteria to maintain assistantship eligibility: (1) enrollment as a full-time graduate student, (2) in good academic standing, i.e., not on probation, (3) satisfactory progress toward their degree. Eligibility does not guarantee financial support. Faculty advisor nomination and selection for an assistantship is required.

- Graduate students who receive any assistantships, must maintain a cumulative 3.0 average in all graduate-level courses (6000-level and above). Students who fail to meet this requirement will not be eligible for graduate assistantship funding. Please refer to Maintain Academic Standing for more details.
- To receive the reduced tuition and fees associated with the Graduate Assistantship for a particular semester, a qualified student must be on the department payroll and follow all the instructions provided by the Business Office in a timely manner.
- Suppose a student changes their degree program/subject area/major advisor after an assistantship offer has been made/extended. In that case, eligibility will be reviewed, and funding may or may not be provided.

4.4 Graduate Assistantship Types

Mechanical Engineering Graduate Assistants (GAs) are employed for up to a half-time basis (average of up to 20 hours per week) during a specified appointment period as indicated on their offer letter. Students must be enrolled full-time (9 graduate-level credits) to receive the GA funding. A Graduate Assistant Differential (GAD), which covers tuition for 9 credit hours or more each Fall and Spring semester and 6 credit hours or more each summer semester, is provided with the following four assistantship types. The GAD is defined as the portion of the tuition and fees paid by the university for the student. Information on Graduate Assistant fees is available via the Clemson tuition and fee calculator. Graduate Assistants are responsible for the cost of fees and health insurance (if applicable).

4.4.1 Graduate Research Assistantship (GRA)

- GRAs are employed to assist faculty in their sponsored research activities.
- The GRA would be terminated due to the student's performance and the availability of research funding.
4.4.2 Graduate Laboratory Assistantship (GLA)

- GLAs are responsible for grading lab reports and attending GLA meetings as needed.
- All GLAs must attend a mandatory training orientation, usually the week before the semester starts. GLAs will be notified about meeting details via email by the Lab Coordinator.
- Regular GLA's will have no more than 4 semesters of GLA support. Students appointed as Lead GLA's will have no more than 6 semesters of GLA support.
- The appointment of GLA is based on the faculty's recommendation and the interview results conducted by the Lab Coordinator.

4.4.3 Graduate Teaching Assistantship (GTA)

- GTAs assist faculty with grading materials and class recitation in undergraduate courses.
- GTAs are expected to interact with undergraduate students on course content. All GTAs are required to pass a mandatory English efficiency exam before the semester starts. All GTAs must receive training, usually in the form of a mandatory meeting at the start of the semester. GTAs will be notified about details via email by the Graduate Student Services Coordinator.
- The appointment of GTA is based on (1) the availability of the GTA position, (2) the major advisor's recommendation, (3) the instructor's evaluation of previous GTA performance, if any, and (4) the student's academic standing.

4.4.4 Graduate Grading Assistantship (GGA)

- GGAs assist faculty with grading materials in undergraduate and graduate courses.
- GGAs are not expected to grade exams and are not expected to exceed their assigned hours. Deviations from these expectations should be discussed with the course instructor and the Graduate Program Coordinator immediately.
- All GGAs must receive training, usually in the form of a mandatory meeting at the start of the semester. GGAs will be notified about details via email by the Graduate Student Services Coordinator.
- GGAs are appointed by semester.
- The appointment of GGA is based on (1) the availability of GGA position, (2) request priority by GGA's major advisor, (3) the instructor's evaluation of GGA performance, (4) the student's GGA application, and (5) student's academic standing.

4.4.5 Endowed Teaching Fellowship

The Endowed Teaching Fellows program is established within the Mechanical Engineering Department to promote Ph.D. students with the potential and desire to pursue an academic career. Through the Endowed Teaching Fellows program, the Department will help such students acquire in-class teaching experience to make them more competitive when applying for a faculty position. The Teaching Fellows program is a two-semester program for each Endowed Teaching Fellow. During the first semester, the Fellow will be advised and will team teach a section of a required undergraduate Mechanical Engineering course with a Faculty Mentor. During the second semester, the Fellow will teach one section of the same course alone. The Fellow will receive a stipend supplement. It is permissible for the Faculty Mentor to be the Fellow's advisor. However, a mentor other than the advisor is suggested to maximize the Fellow's exposure to different perspectives on the academic enterprise.

**Announcement:** The Graduate Research Committee (GRC) will announce the call for nominations for the Endowed Teaching Fellows program to all Ph.D. students and Mechanical Engineering faculty via email at
the beginning of each Fall and Spring semester, contingent on the availability of funds. The announcement will contain this Teaching Fellows Policy and the relevant due dates.

**Eligibility:** To be considered for an Endowed Teaching Fellowship, the student applicant:

- Must be a Ph.D. student who has passed the Ph.D. Qualifying Exam.
- Must have completed at least two semesters as a graduate student at Clemson before submitting their application package.
- Must have a graduate GPA of 3.5 or higher at the time of submission of their application package.
- Must be perceived by each member of the student's advisory committee as having high potential to be successful in academia.
- Must possess good communication skills.

**Application:** To apply for the Endowed Teaching Fellowship, the student must submit the following to the respective subject area group Chair and the Chair of the Graduate Research Committee. Students who fail to submit one or more of the above or fail to meet the application deadline will not be considered.

- Letter of interest and statement of career plans.
- Resume.
- Academic record.
- A nomination statement written by the student's academic advisor and signed by each member of the student's advisory committee stating that the student has high potential to be successful in academia.

**Considerations by Subject Area Group:** Each subject area group will conduct a meeting to discuss the qualifications and potential of each applicant in that subject area. This will be followed by a closed ballot. Ballots will permit a yes or no vote for each applicant. The subject area group will provide the Chair of the Graduate Research Committee with a ranked list of the applicants indicating ties if any. The subject area groups are free to forward to the Chair of the Graduate Research Committee any other comments about the candidates that they deem relevant.

**Considerations by the Graduate Research Committee:** The Graduate Research Committee reviews both the application packages and the ballots it receives from the subject area groups. Candidates that the Graduate Research Committee considers having made the final cut are required to give a brief oral presentation to the Graduate Research Committee to assess their communication and potential teaching skills. The Graduate Research Committee contacts these candidates with details on the exact length and topic of the oral presentation as well as the location and time of the presentation. The Graduate Research Committee discusses each applicant's qualifications and potential. This is followed by a closed ballot vote to rank the candidates. Ballots will permit a yes or no vote for each applicant. Ballots will be tallied by the chair of the Graduate Research Committee to provide a ranked list of the applicants indicating ties, if any. All subject area groups and Graduate Research Committee ballots and ranked lists are given to the Department Chair.

### 4.5 On-Campus Employment Procedures

Students on assistantships must meet with the Graduate Student Services Coordinator who will provide them with an offer letter. The responsibilities and details of an individual's financial support are included in his or her official offer letter from the Department Chair. This letter requires the individual's signature indicating an acceptance of the terms. GLAs, GTAs and GGAs are notified later of their teaching duties.

To maintain the assistantship, students must complete the duties in a satisfactory manner and make satisfactory progress toward their degree.
4.5.1 I-9 Form

After receiving an offer letter, students must meet with the Mechanical Engineering payroll representative to complete their hiring paperwork and verify the reduction of fees. Two forms of identification are needed to fill out the I-9 form, which verifies citizenship. Forms of identification accepted include a valid driver's license, original social security card, original passport, and birth certificate. Assistantship payment will be issued on a two-week lag on a semi-monthly basis. Students with assistantships will need to submit weekly "time captures" online as required by the University HR office.

4.5.2 International Students

If you are an international student receiving an assistantship, you must meet with the Graduate Program Student Services Coordinator before semester starts. You will see the payroll representative to complete the payroll paperwork. New international students must acquire a social security card, an Employment Verification form & International Hire request will be completed. The new student uploads the Employment Verification form in the Sunapsis Student Portal with immigration/check-in documents. It will be processed within two business days. Employment Verification form will be provided the Graduate Student Services and needs to be signed by the International Services.

To apply for a Social Security Card, you must be in the United States for at least ten days. Take the Signed Employment Verification letter, original immigration documents, and clear legible copies of your documents to the Social Security office (nearest office located at 4 Civic Center Boulevard Extension, Anderson, SC). Ask for a receipt letter when submitting your application. Once you receive your letter, follow Clemson's International Employee Hiring Instructions to complete the remaining hiring forms and make an appointment with the Clemson International Employment Office (located at ASB Bldg, 108 Perimeter Road) for final verification. Please consult with International Employment Office for the documents needed for the appointment.

4.5.3 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.

4.5.4 Performance and Good Standing

Students who received a Graduate Assistantship should maintain a satisfactory progress towards the degree and perform a high level in the assistantship duties and follow all other expectations of conduct appropriate to a graduate student. Failure to comply with these expectations can result in loss of support and other sanctions outlined in the Clemson University Graduate Policies and Procedures Handbook. Conduct, ethical, and integrity violations can lead to immediate termination of the assistantship and other sanctions outlined in the Clemson University Graduate Policies and Procedures Handbook.

All students who received GA support are responsible for tracking time worked accurately and timely.

4.6 Internships

Summer internships can enrich the learning experience of graduate students in their field of study. All graduate students are allowed to participate in summer intern opportunities at their major advisor's discretion. Regular semester internships are subject to approval from the major advisor and Graduate Program Coordinator. Since the Department has more restrictive policy for Internships then the
International Services, students need to consult with the Student Services Coordinator prior to starting their application process.

- Participation of an internship should not cause a delay in a student's graduation.
- International students who hold F-1 visa should apply for Curricular Practical Training (CPT) to work off-campus.
- MS non-thesis industrial track students are eligible to apply for full time internships in their third regular semester with the registration of zero credit INT8010-004. The location of the internships is not restricted (anywhere within US).
- The students must maintain good academic standing and complete a minimum of 18 credits in order to participate in the internships during the allowed period.
  - With major advisor’s approval, international students are eligible to do internships in the summer semesters after one year of graduate study.
  - After one-year graduate study, international students may apply part time internship (up to 20 hours per week) in South Carolina during a regular semester with the additional satisfaction of the following criteria. (1) They register as full time students. (2) They satisfy the course registration requirements. (3) They do not hold any on-campus GA positions. The location of the internship should be in the commuting distance for students to take regular in-person classes.
  - If international students apply for reduce course load in their last semester before graduation, they may apply internships in South Carolina with the satisfaction of the following criteria. (1) The location of the internship should be in the commuting distance for students to take regular in-person classes. (2) They satisfy the course registration requirements. (3) Full time internships may be approved only when the students register no more than 3 credits.
- Without approval from research advisor about the completion of the thesis work, MS thesis will not be approved for internships in their last semester.
- Internship will not be approved under the I-20 extension.
- In order to apply CPT, students should (1) communicate with graduate student service coordinator to confirm their eligibility by scheduling an appointment via email at ikharit@clemson.edu, (2) receive permission from the major advisor; (3) receive an internship offer and fill out the INT-130 form; (4) submit the Departmental CPT application form. The student should expect to receive the application decision from the Graduate Program Coordinator within 5 business days. Please allow up to two weeks for processing between International Services, ME Department, and Career Services Office.

5 Departmental Administrative Policies

5.1 Personal Mail

The department is not to be used as students' personal physical mailing address. The department assumes no responsibility for personal deliveries to Fluor Daniel EIB. Outgoing mail, both US and campus mail, can be placed in the appropriate receptacles in the reception area. You must provide adequate postage for any US mail. International mail must be taken to the US Post Office.

5.2 Keys and Keycards

Key and keycard requests should be initiated by your major advisor to the Graduate Program Student Service Coordinator. The key(s) issued to you are for your use only, they must never be loaned to anyone else. Failure to observe this rule will result in your key privilege being withdrawn. All keys require a deposit of $100 due at the time of assignment. Keys must be returned before the student leaves. The deposit will
be returned at the time the key is returned to the department. There is a fee for each key not returned to the department.

5.3 Building Security

Building security is everyone's responsibility. You should make sure to lock your office and laboratory doors when you leave. Building doors should not be propped open at any time in the evenings and on weekends. Do not bring personal items of value into the building. Do not allow people in the building if they do not have card access, especially during sporting events. Thefts can occur. Do not be careless about building security. You may be the next theft victim.

On football weekends, the Fluor Daniel building will be locked. Persons entering or leaving Fluor Daniel building on those days should ensure that all doors are locked behind them. Report building problems or if there is anything wrong outside of normal office hours to your major advisor and/or the department chair after you have called the University Security Office at (864) 656-2222.

5.4 Graduate Student Offices

Graduate student offices will be assigned after the start of the semester. Priority is given to GRA, GLA, GTA, GGA, and then unsupported research students. Office space is limited, and not all students will have desks. If a student is assigned a desk, it is this student's responsibility to maintain the area clean and organized. No cooking is allowed in student offices; the graduate lounge has a microwave and a sink for such a purpose. As this is shared space, all students are expected to always act professionally and courteously towards others.

5.5 Office Supplies

The department does not furnish office supplies to graduate students, although office supplies can be requested for lab spaces and grading needs through the Graduate Student Services Coordinator. Entrance to the supply room is by key only and a staff or faculty member must accompany students.

5.6 Departmental Copy Machines

Copy machines are located throughout the building and are available for graduate student use for research purposes. A code is required for access which must be approved by student's major advisor. This code can be obtained from the student's major advisor.

5.7 Departmental Machine Shop

The department maintains a well-equipped machine shop staffed by departmental technicians in G09 Flour Daniel EIB. Any request for services of the departmental technician must be made in writing. Under no circumstances is anyone to use any of the department's machine shop equipment without prior authorization and instruction from the technician as to proper use of the equipment.

5.8 Procurement

Graduate students will be held responsible for purchasing any equipment they order without proper authorization. All purchases by graduate students will need written authorization from their major advisor before initiating any purchase. Major advisor may authorize the purchase via email or written notice with an account number to a Fiscal Analyst.

5.9 Student Travel

Department-specific travel information and guidelines from the Clemson University Travel Guidelines Index have been incorporated into this section. The complete Guidelines Index, including authority references and guidelines specific to University administration, is available at the Procurement and Business Services at Clemson University. Clemson University adopted a travel and expense tool Concur to
streamline the travel process. If you have questions, please contact the ME travel representative in Table 1 for more details.

5.10 Safety and Hazardous Materials

Safety is everyone's business. Graduate students are expected to adhere strictly to all safety regulations.

Eye and Face Protection: Eye and face protection devices that meet OSHA requirements and American National Standards for industrial eye protection should be the minimum eye protection used for activities where there may be flying or falling particles or chemical splashes. Either safety or prescription glasses with side shields must be worn in any laboratory as appropriate unless the departmental representative has made an exception. Visitors to any laboratory must wear safety or prescription glasses, preferably with side shields. The wearing of contact lenses is strongly discouraged. Soft contact lenses are susceptible to the absorption of vapors and may aggravate some chemical exposures, particularly if they are worn for extended periods. Manufacturers of soft lenses generally recommend they not be used in certain atmospheres.

Body Protection: Wear closed-toed shoes at all times (i.e., sandals, flip flops, and bare feet are not permitted). Shoes made of impermeable material such as leather are strongly recommended. Sneakers offer little protection against falling objects or chemical spills. High-heeled shoes pose a hazard and are not to be worn when working in laboratories.

Footwear: Wear closed-toed shoes at all times (i.e., sandals, flip flops, and bare feet are not permitted). Shoes made of impermeable material such as leather are strongly recommended. Sneakers offer little protection against falling objects or chemical spills. High-heeled shoes pose a hazard and are not to be worn when working in laboratories.

Hazardous Waste Management: Information on Hazardous waste management can be found on the Occupational and Environmental Safety website.

6 University Resources

6.1 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 the Redfern website.

6.2 Professional Development

You have many opportunities to develop professionally in addition to your course work and research. These include presenting talks and posters at regional and national conferences, becoming a student member of professional organizations, and preparing for your eventual job search.

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.
6.3 Grievance Policy

Academic grievances are handled through the Graduate School. It is advisable to visit the Ombuds Office prior to filing a grievance.

6.4 Counseling Services

The demands of graduate school can sometimes seem overwhelming. If you feel you or a colleague 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 or call them at (864) 656-2451.

6.5 Harassment Policy

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: 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:

- Submission to such conduct is made explicitly or implicitly a term or condition of an individual's employment or academic standing.
- 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.
- 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 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 teaching staff members 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, the officer, supervisor, or faculty member may be held accountable for unprofessional behavior. Difficulties can also arise from third parties who may feel that such relationships have disadvantaged them. 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, advise, or evaluate. Any questions concerning these statements or Clemson University's Policy on Sexual Harassment should be directed to the Office Access & Equity at (864) 656-3181.

### 6.6 Emergency Services

In the event of an emergency, call the emergency services (911) or the Clemson University Police Department at (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.

### 6.7 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 Newsletters for more information or contact the GSG office at (864) 656-2697. Your active participation in the Graduate Student Government is encouraged.

### 7 Confirmation of Review

All students must complete the online form confirming receipt, review, and understanding of this manual. The online form can be provided by the Graduate Student Services Coordinator. Please see the form on the next page.
FORM 15: ACKNOWLEDGMENT OF CONTENTS

(Place in student's departmental record)

I have read, understand, and will comply with the policies and procedures contained in the Manual for Graduate Students of the Mechanical Engineering Department.

Signature:

________________________________________________________

Name (Please print):

________________________________________________________

Clemson Email:

________________________________________________________

Date:

________________________________________________________