

School of Mechanical and Materials Engineering

Graduate Student Handbook, 2018 – 2019

This handbook belongs to



Table of Contents

1. WELCOME!	
2. Important Information for New Students	7
3. MISSION STATEMENT AND INTRODUCTION	
4. ADMINISTRATION OF GRADUATE PROGRAMS	10
4.1. Graduate School Office	10
4.2. Graduate Studies Committee	
4.3. Graduate Program Bylaws	
5. Special Programs for Undergraduate Students	
5.1. Undergraduate Senior Students—Reserve Graduate Credit	10
5.2. Select Graduate Admission (SGA) Program	
6. APPLICATION AND ADMISSION	11
6.1. Application Process	
6.2. Deadlines for Applying	
6.3. Transfer Students	
6.4. General Admission Criteria	
6.4.1. Undergraduate Degrees	
6.4.2. Engineering Technology Degrees	
6.4.3. CGPA and GRE Requirements	
6.4.4. Exceptions to Policy and Ten Percent Rule	
6.5. Advanced Degree Seeking Graduate Students	
6.5.1. Provisional Admission	
6.6. Financing Your Education	
6.6.1. Assistantships and Scholarships	
6.7. Students with Disabilities	
6.8. Unsuccessful Applicants	
6.9. Visa Problems	
7. DISCLAIMER	
8. ACADEMIC EVALUATION OF STUDENTS (ANNUAL REVIEW)	
9. GRADES, ENROLLMENT, AND REINSTATEMENT	
9.1. Grades: Minimum Grade Point Average (GPA)	
9.2. Grades: Incomplete	
9.3. Grades: Research Credits and Policy on Unsatisfactory Grades	
9.4. Continuous Enrollment	
9.5. Continuous Enrollment: International Students	
9.6. Continuous Enrollment: Continuous Doctoral Status (CDS)	
9.7. Continuous Enrollment: Exceptions (Leave)	
9.7.1. Leave of Absence	
9.7.2. Internship Leave	
9.8. Part-time Enrollment	
9.9. Full-time Enrollment	
9.10. Research Credits	
9.11. ME / MSE 701 Master's Independent Capstone Project and/or Examination	
9.12. Reinstatement: Probationary Continuing Enrollment	
9.13. Reinstatement Policy	10
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
9.15. Reenrollment for a Degree-Seeking Student	l/
10. 1 Signing of Official Graduate Documents	<i>18</i>
10.1. Signing of Official Graduate Documents	18
10.2. Electronic Signatures on Graduate School Forms	
11.1. Academic Dishonesty and Plagiarism—who should report it and how	
11.1. Academic Dishonesty and Flagransin—who should report it and now	10

12. Advisors and Research Committee	
12.1. Temporary Advisor	
12.2. Policy Regarding Failure to Find Permanent Advisor by End of First Semester	
12.3. Permanent Advisor and Research Topic (Master's Thesis and PhD Programs)	
12.4. Permanent Advisor (Master's Non-Thesis / Coursework-Only Program)	
12.5. Research Committee (Master's Thesis Program)	
12.6. Research Committee (Master's Non-Thesis / Coursework-Only Program)	19
12.7. Research Committee (PhD Program)	19
12.8. Research Committee—External Committee Member	
12.9. Research Committee and Program of Study Form (Master's Thesis and PhD Programs)	20
12.10. Research Committee and Program of Study (Master's Non-Thesis / Coursework-Only Program)	20
12.11. Responsible Conduct of Research Training	20
12.12. Discrimination, Sexual Harassment, and Sexual Misconduct Prevention Training	20
12.13. Expectations of Faculty Advisors and Mentors	20
13. PROGRAM OF STUDY AND COURSEWORK	
13.1. Program of Study Request Form and Its Submission	21
13.2. Selection of Courses	21
13.3. Graded Coursework, Pass/Fail Courses, and Audited Courses	21
13.4. 100- and 200-level Courses	21
13.5. 300- and 400-level Courses, Seminar, and non-MME Courses	21
13.6. Repeating a Course	22
13.7. Cumulative GPA for Graduation	
13.8. Revisions to the Program of Study	22
13.9. Transfer Course Policy	
13.10. Time Limit for Completion of Degree	
13.11. Extension of Degree Program Deadline	
13.12. WSU/University of Idaho Cooperative Course Program	
14. MASTER'S DEGREE PROGRAM (THESIS)	
14.1. Dual Master's Degree Programs (internal to WSU)	
14.2. MS in Mechanical Engineering (Thesis)	
14.2.1. Program Requirements for MS ME	
14.2.2. Timing of the program for MS ME	
14.2.3. Thesis option and thesis instructions for MS ME	24
14.2.4. Final Examination for MS ME	24
14.2.5. Final Examination for MS ME: Failed.	25
14.3. MS in Materials Science & Engineering (Thesis)	25
14.3.1. Program Requirements for MS MSE	
14.3.2. Timing of the program for MS MSE	
14.3.3. Thesis option and thesis instructions for MS MSE	
14.3.4. Final Examination for MS MSE	
14.3.5. Final Examination for MS MSE: Failed.	
14.4. MS Program (Interdisciplinary Degrees)	
15. MASTER'S DEGREE PROGRAM (NON-THESIS / COURSEWORK-ONLY)	
15.1. MS in Mechanical Engineering (Non-Thesis / Coursework-Only)—INTO Pathway	
15.2. MS in Mechanical Engineering (Non-Thesis / Coursework-Only)—INTO Direct	
15.3. MS in Mechanical Engineering (Non-Thesis / Coursework-Only)—regular applicant	
15.4. Structure of ME 701 / MSE 701	
15.5. Committee and Program of Study (Non-Thesis / Coursework-Only)	
15.6. Balloted evaluation	
15.7. MS in Materials Science & Engineering (Non-Thesis / Coursework-Only)	
16. PHD PROGRAM	
16.1. Program Requirements for PhD ME.	27
16.2. Graduate Minor for PhD ME	
16.3. Timing of the Program for PhD ME.	
16.4. Qualifying Examination for PhD ME	
16.5 Preliminary Examination for PhD ME	27

16.6. Preliminary Examination for PhD ME: Failed	28
16.7. Dissertation and Dissertation Instructions for PhD ME	
16.8. Final Examination for PhD ME	29
16.9. Final Examination for PhD ME: Failed	
16.10. PhD Program (Interdisciplinary Degrees)	29
17. SUMMARY OF PROGRAMS AND COURSE REQUIREMENTS	30
18. SCHOOL OF MME MILESTONES	
18.1. MS Program	
18.2. PhD Program	34
19. Graduate Assistant Guidelines	36
19.1. Definitions	36
19.2. Assistantship Requirements	
19.2.1. Eligibility for appointment	
19.2.2. Eligibility for appointment—additional criteria for Teaching Assistants	
19.2.3. Maintaining an assistantship	
19.2.4. TA who cannot start their position on time	
19.3. Duration of Appointment.	
19.4. Duties and Responsibilities: General	37
19.5. Duties and Responsibilities: Teaching Assistant	
19.6. International Students: English Proficiency Examination for TA's	
19.7. Leave Policy	39
19.7.1. Official Leaves of Absence	40
19.7.2. Internships	40
19.7.3. Serious Health Problems or Personal Circumstances	40
19.7.4. Travel: Conferences, Seminars, etc.	40
19.7.5. Travel: International Travel Registry	40
19.7.6. Vacation and Personal Leave Requests	40
19.8. MME Outstanding Teaching Assistant Award	40
19.9. MME Outstanding Researcher Award	41
19.10. Professional Conduct	41
19.11. Residency Requirements	41
19.12. Teaching Assistant Evaluations	41
19.13. Teaching Fellows Program	41
19.14. Termination of Appointment or Reduction in Pay	42
19.15. Working Additional Hours Beyond the .50% Appointment	42
20. ACADEMIC ASSESSMENT AND OUTCOMES INFORMATION	
20.1. NWCCU	44
20.2 School of MME Outcomes Assessment Plan	44



School of Mechanical and Materials Engineering VOILAND COLLEGE OF ENGINEERING AND ARCHITECTURE

1. WELCOME!

Dear graduate students:

It is my great pleasure to welcome you to the School of Mechanical and Materials Engineering (MME) as you embark on a challenging and exciting phase in your education, career, and personal life. We are pleased that you are now a part of the School of MME community at WSU. Succeeding in graduate school requires hard work, innovative ideas, a dedication to your field, and a high level of productivity. However, in doing so, you will build on the tremendous success of previous generations of excellent students, faculty, and staff that have made the School of MME a world-class program, and help us to bring our School to even higher levels of excellence. We pride ourselves with a very strong graduate program and very successful graduate students, and I am sure that with your hard work you will add to this success.

Professor Prashanta Dutta, Chair of the Graduate Studies Committee, will be in charge of all aspects of our graduate program. He, with the help of our Graduate Academic Coordinator, is deeply committed to having an excellent graduate program in the School of MME. They, along with your major advisor, will assist you in setting up your academic and research program.

Once again, I welcome you to the School of MME and hope you have a great and productive time here.

Dr. Indranath Dutta Director



School of Mechanical and Materials Engineering VOILAND COLLEGE OF ENGINEERING AND ARCHITECTURE

Welcome Students!

I would like to add my welcome to that of Dr. Indranath Dutta. We believe that the School of MME offers an outstanding graduate program, and we are pleased that you have taken the opportunity to study here. As Chair of the Graduate Studies Committee (GSC), I am involved in the administration of the graduate programs in the School of MME. In particular, the GSC deals with student admissions, policies and procedures, and the administering of the various graduate examinations.

It is important that you read this handbook very carefully. It has essential information regarding milestones that must be met, and requirements to be fulfilled, for each of the graduate degrees offered through the School of MME. It also references the *Graduate School Policies and Procedures Manual* where necessary.

If you have any questions concerning any area of your graduate life here at WSU, you'll find that my door is always open to you. My aim, and that of all my colleagues here, is to ensure that your stay at WSU is both enjoyable and productive. The strength of our graduate program relies on attracting bright students, and helping them grow into first class professionals in their respective fields. Our graduates have enjoyed a great deal of success over the years, and we hope that you will be part of the next generation of successful graduates from the School of MME.

Prof. Prashanta Dutta, PhD Associate Director for Graduate Programs Chair, Graduate Studies Committee

2. IMPORTANT INFORMATION FOR NEW STUDENTS

All students are responsible for reading these items as soon as possible:

- 1. <u>This handbook</u>. You are expected to reference this handbook throughout your program. Updates to the handbook can be found on our School's web site at https://mme.wsu.edu/graduate/.
- 2. <u>Academic Integrity Policies and Resources</u>. This web site provides information on how to prevent plagiarism, and the academic integrity violation process, http://academicintegrity.wsu.edu.
- 3. <u>Graduate School Guidelines for Good Practices in Graduate Education</u>. This document details the expectations of graduate students, WSU programs and departments, faculty advisors and mentors, TAs, and RAs. See https://archive.wsu.edu/gradschool/policies-procedures.
- 4. Graduate Mentor Policy. See https://gradschool.wsu.edu/documents/2014/12/mentor-policy.pdf.
- 5. <u>Graduate Student Formal Grievance Procedures for Academic Progress and Other Issues.</u> See https://gradschool.wsu.edu/documents/2017/07/gs-grievance-procedures.pdf/.
- 6. <u>Graduate School Policies and Procedures Manual (GS PPM)</u>. This manual provides the guidelines for graduate study at WSU. See http://gradschool.wsu.edu/policies-procedures.
- 7. <u>Graduate Student Rights and Responsibilities</u>. This provides a code of ethics to be used as guidelines for faculty and graduate student interaction. It focuses on graduate student rights and responsibilities, and on avenues for adjudication of these rights and responsibilities. See https://gradschool.wsu.edu/chapter-twelve.
- 8. <u>Policy on Faculty-Student and Supervisor-Subordinate Relationships.</u> See http://public.wsu.edu/~forms/HTML/EPM/EP28_Faculty-Student_and_Supervisor-Subordinate Relationships.htm.
- 9. <u>Policy Prohibiting Discrimination, Sexual Harassment, and Sexual Misconduct</u>. This policy expresses the commitment of WSU to maintaining an environment free from discrimination, including sexual harassment and misconduct, https://policies.wsu.edu/prf/index/manuals/executive-policy-manual-contents/ep15-discrimination-sexual-harassment-sexual-misconduct/.
- 10. <u>Standards of Conduct for Students</u>. WSU, a community dedicated to the advancement of knowledge, expects all students to behave in a manner consistent with its high standards of scholarship and conduct. Students are expected to uphold these standards both on and off campus and acknowledge the university's authority to take disciplinary action. The Conduct Policies can be found at https://conduct.wsu.edu/policies and include Standards of Conduct for Students, Alcohol and Drug Policy, Good Samaritan Guideline, Downloading or Sharing Files/Software, and Group Accountability Statement.

Students on an assistantship (TA or RA) are also responsible for reading these items as soon as possible:

- 1. The *Graduate Assistant Guidelines* section of this handbook.
- 2. If you are a non-resident domestic student, pay special attention to the *Residency Requirements* section of the *Graduate Assistant Guidelines*.

All students (with or without an assistantship) are required to take these mandatory trainings as soon as possible:

- 1. Responsible Conduct of Research. WSU's Office of Research and the Graduate School office requires all graduate students to complete the Responsible Conduct of Research online training before or during their first semester as a graduate student, see http://www.ora.wsu.edu/rcr/rcrtraining.asp. Even if a student is not involved in research at the present time, the training must be taken as it applies to all areas of the Program of Study, including instruction and research through to the thesis/dissertation process. Refresher training must be completed once every three years.
- 2. <u>Discrimination, Sexual Harassment, and Sexual Misconduct Prevention</u>. This training is required of all graduate students. This is a web based training located at http://hrs.wsu.edu/dshp/. Students are encouraged to take this training as soon as possible.

Students on a TA appointment are required to take this mandatory training before their appointment begins:

- 1. English Proficiency Exam. If you are an international student and will have a TA position, and if you have not previously held a TA at WSU, you will be required to take an English Proficiency Examination (also called the ITA Evaluation). This is administered by the Intensive American Language Center (IALC). The purpose is to ensure that undergraduate students can understand all assistants with whom they have contact (classroom or otherwise). Please note that a faculty representative from the student's department serves on the testing committee. In our School, the faculty representative is the student's advisor. Failure to take this exam in a timely manner or failure to show up for a scheduled exam can result in termination of the teaching assistantship. See https://ip.wsu.edu/learn-english/teaching-assistant-evaluations/.
- 2. <u>FERPA training</u>. All students on a TA appointment are required to take FERPA training. FERPA stands for Family Educational Rights and Privacy Act. You can log in to the online training at https://www.ronet.wsu.edu/Main/Apps/FERPATest.ASP.

General information of importance to all students:

- <u>American Society of Mechanical Engineers (ASME)</u>. Students are encouraged to join the WSU Chapter of the ASME (http://asme.wsu.edu).
- Graduate & Professional Student Association (GPSA). The GPSA is the leading voice for graduate and professional students at WSU. Their primary goal is to facilitate the relationship between graduate and professional students and the WSU community. They bring unity to these students in the form of academic and professional support services, social activities and student outreach. Some of their programs and services include the GPSC Study Center, evening childcare, and travel and registration grants to aid in travel and registration costs associated with attending conferences and meetings (http://studentinvolvement.orgsync.com/org/gpsa/home).
- Graduate School forms. All Graduate School forms can be found at https://gradschool.wsu.edu/facultystaff-resources/18-2/.
- <u>Graduate student offices</u>. Graduate student office space is very limited, and is assigned by the Graduate Academic Coordinator following a priority list established by our School. Our School policy is that a student is not allowed to move the furniture around or change offices without the prior consent of the Graduate Academic Coordinator. If the policy is not followed, the student risks losing their office.
- <u>Mailboxes</u>. All Pullman campus students are assigned a mailbox in Sloan 210 that should be checked regularly. WSU policy is that individuals may not use WSU mailing services for personal mail (either to receive it, or to send it). Personal use of WSU stationery and stamps is a violation of WSU policy.
- <u>MME Listserv</u>. New students will be added to the MME Listserv by the Graduate Academic Coordinator. Our School uses this listserv to keep graduate students informed of important information, and it is expected that students will regularly check their WSU email.
- <u>WSU Email Address</u>. Every WSU employee or student is assigned an official WSU email address that is available to them and is listed in the WSU Directory. People at WSU will use this official WSU email address to correspond with you. For assistance with your WSU email address, contact CougTech, http://cougtech.wsu.edu/.
- Office supplies and clerical assistance. These supplies and services are provided to TAs to the extent required for their teaching responsibilities. For assistance, please see the staff in Sloan 201.
- <u>Photocopy machine</u>. Photocopy machine use by students is restricted to teaching or research duties only. <u>No personal copying is allowed</u>, including no copying of the thesis/dissertation. The guidelines are posted on the wall by the photocopy machine.
- <u>Photographs</u>. It is MME policy to keep a photograph of both graduate and undergraduate students in the display case by the main office (Sloan 201). Please contact staff in the main office (Sloan 201) in order to have your picture taken.

- <u>Transportation</u>. There is a very efficient transit (bus) system to and from campus that is free for faculty, staff, and students. You must show your CougarCard to the bus driver in order to ride for free. Information about all modes of local transportation including parking can be found at https://wsu.edu/life/transportation/. Note that during the breaks (summer, Thanksgiving break, Winter holiday break, Spring break), the Pullman Transit system typically has reduced service so be sure to check the service schedule, https://www.pullman-wa.gov/departments/pullman-transit.
- <u>Student Legal Services (SLS)</u>. SLS is an ASWSU-funded, student-run office created to service the legal needs for current students at WSU, free of charge. Their office is located in the CUB. They have a pamphlet available to give you which summarizes the landlord/tenant laws of Washington State. An excerpt of the Washington State Residential Landlord/Tenant Law can be found at https://offcampusliving.wsu.edu/info-for-students-and-parents/landlord-tenant-law.
- WSU Parking. The parking web site at http://transportation.wsu.edu has links to an online campus parking map, parking rules, etc.
- Police Department. There are two police units in Pullman that collaborate with each other: 1) The WSU Police Department (see http://www.pullman-wa.gov/departments/police). The WSU Police web site has various student relevant resources such as the campus safety plan, what to do in case of an active shooter, sexual assault investigations, inclement weather (weather delay/closures), etc. It is highly recommended that all students sign up for emergency notifications via WSU Alerts, see https://alert.wsu.edu/.

Important computer security information:

- It is important that the Windows software on all computers connected to the campus network be kept current with security patches and updates from Microsoft. Without security patches, all of the files on your PC could be lost and your PC used by hackers for their purposes. You can find update instructions at Microsoft's update site at http://update.microsoft.com. Follow the on-screen instructions—the Microsoft site is designed for end users and it is easy to install the patches and updates. You may need to check for updates several times to get all the updates installed. It is also strongly suggested that you update your home computers as well.
- All PCs on the campus network must have anti-virus software installed. MME-owned PCs with Windows 7
 and before may have MS Forefront installed. Windows 10 has built-in anti-virus. For privately owned
 computers, use MS Security Essentials or a similar product.

Mailing Lists (ListServs). Listed below are mailing lists you may be interested in subscribing to (they are all free):

- Beasley Performing Arts Coliseum news (https://beasley.wsu.edu/join-our-listsery).
- WSU Alert (http://alert.wsu.edu). Subscribe to be notified of emergency alerts for the Pullman campus at myWSU (the myWSU link can be accessed through the WSU Alert web site).
- WSU Insider (https://news.wsu.edu/announcements/). This is an on-line information service.

3. MISSION STATEMENT AND INTRODUCTION

The Purpose of Graduate Study in Mechanical Engineering and Materials Science and Engineering

The goal of graduate education is to enable the student to become an independent thinker and self-directed professional; it is not just a set of facts to be learned or obstacles to overcome. A graduate education, like any education, is part of a life-long process that should not end when the degree is earned. Thus, it is particularly important to learn, in the course of formal education, what are central and generative questions to ask about one's field, and how professionals approach these questions both conceptually and practically.

Graduate education should provide sufficient understanding of the central materials and concepts of a sub-discipline in MME to serve as a basis and a framework for critical thinking, reading, writing, and research. In addition, a graduate education should provide some practical, as well as theoretical, understanding of how to function as a professional – for instance, how to be a good teacher, how to direct a research project, how to present papers at meetings, and how to publish those papers.

Welcome to the School of Mechanical and Materials Engineering (School of MME) at Washington State University! Our graduate program has a long history of excellence in graduate education. Our School offers specialization in a variety of disciplines in which graduate students develop cutting-edge knowledge and techniques. Our faculty members conduct research in a wide variety of areas supported by a range of sources, including governmental agencies, national laboratories, industry, and charitable foundations.

This handbook gives general information and policies pertaining to the MME graduate programs, and also provides specific details and requirements for both programs. Except for emphasis, the information contained in the *Graduate School Policies and Procedures Manual (GS PPM)* is not repeated herein. Those policies and procedures are University-wide policies upon which the MME graduate student guidelines expand. All graduate degree programs in MME must meet all requirements delineated in this handbook as well as all requirements of the Graduate School.

Graduate work, including both classroom and research endeavors, is a cooperative venture between faculty and students. Faculty are expected to guide and assist students in gaining knowledge, experience, and ability. However, the quality of education, particularly at the graduate level, is primarily dependent upon a student's individual efforts. Students are encouraged to make suggestions and to contribute to the development of courses, programs, and research areas.

4. Administration of Graduate Programs

4.1. Graduate School Office

Under the direction of the Provost, Graduate School administration rests with the Dean and his/her designees in consultation with the Faculty Senate's Graduate Studies Committee. See the *GS PPM*.

4.2. Graduate Studies Committee

Associated with each graduate degree program at WSU is a Graduate Studies Committee. The School of MME Graduate Studies Committee (MME GSC) is composed of a Chair and approximately five to seven MME faculty. The committee members are appointed by the School Director, and their appointment period starts on August 16 and ends on August 15 of the next year.

4.3. Graduate Program Bylaws

All graduate programs must have approved Bylaws on file with the Graduate School office. The Bylaws define graduate faculty membership, the Graduate Studies Committee, Graduate Student Committees, and signature authority. They also list the Graduate Faculty participants. Any changes to the Graduate Program Bylaws supersede any information listed in this handbook.

5. Special Programs for Undergraduate Students

5.1. Undergraduate Senior Students—Reserve Graduate Credit

As set forth in the GS PPM, seniors who have at least a 3.0 grade point average in the last 60 semester hours of graded undergraduate work at WSU may register for up to 6 semester hours toward a thesis master's degree, and up

to 9 hours for a non-thesis master's or doctoral degree in the Graduate School in excess of that required to complete the bachelor's degree. These credits may not simultaneously be counted as required credits toward both a baccalaureate degree and an advanced degree. It is our School policy that the reserved classes can only be 500-level ME or MSE courses, and the classes must be taken as part of the student's technical electives. However, a student can still take/reserve other 500-level classes, but they can't be counted as technical electives. Special paperwork must be completed in order to reserve the credit, and it should be submitted before the semester begins. Please see the Graduate Academic Coordinator for assistance. To apply the course(s) towards the student's graduate program, the student will need to list the course(s) on their Program of Study when it is filed in the student's second semester of graduate study.

5.2. Select Graduate Admission (SGA) Program

The University has a program called the Select Graduate Admission (SGA) Program which purpose is to encourage outstanding undergraduate students with top academic records to remain at WSU for a graduate degree by:

- Extending an early offer of admission and support to outstanding candidates.
- Removing financial and other costs associated with regular application.
- Potentially reducing the total number of combined semesters required to complete the undergraduate/graduate degree (without reducing the credit requirements for either).

The student must be nominated for this program by their future graduate program advisor. More information on this program can be found at http://gradschool.wsu.edu/chapter-four-e.

6. APPLICATION AND ADMISSION

6.1. Application Process

Complete application instructions and a list of the application material that our School requires can be found on our web site at https://mme.wsu.edu/graduate/application.

6.2. Deadlines for Applying

Our School adheres to the University's priority application deadlines, namely January 10 for the fall semester (classes begin mid-August) and July 1 for the spring semester (classes begin mid-January). If a prospective student wants to apply after the priority deadline, they should contact our School to find out if we are still accepting applications, gradapp@mme.wsu.edu.

6.3. Transfer Students

Like most universities in the U.S., our School has a policy of not accepting students who have already started a graduate degree program at another university unless the student can provide a form called Student in Good Academic Standing. The student can obtain this form from the Graduate School office at gradschool@wsu.edu. The Dean of the Graduate School of the student's university must sign and submit this form to the Graduate School office (the student is not allowed to submit it). If the Dean is not willing to complete the form, the Chair of the student's department (or the Chair of their Graduate Studies Committee) can submit it. The form verifies to WSU that the student is in good academic standing at the university, i.e., making acceptable progress towards their degree and that their research was progressing. If the student can provide the form, our School would also need a written response from the student indicating why they wish to leave the program. These are then reviewed along with the other required application material.

6.4. General Admission Criteria

6.4.1. Undergraduate Degrees

A Bachelor of Science degree from an accredited program in mechanical engineering or materials science & engineering provides a good background for our graduate programs. We routinely admit students with bachelor degrees in other engineering disciplines, mathematics, and the physical sciences but the student may be required to make up requisite undergraduate deficiencies.

6.4.2. Engineering Technology Degrees

Students who have an Engineering Technology degree will not be considered for admission to our graduate programs until they take additional courses so that they can obtain a BS ME degree first (from WSU or elsewhere). Our experience suggests that applicants with an Engineering Technology degree typically need 4 or 5 semesters (2 to 2.5 years) worth of courses to obtain a BS ME degree.

6.4.3. CGPA and GRE Requirements

Our current admission requirements, including CGPA and GRE scores, can be found on our web site at https://mme.wsu.edu/graduate/application/. Please note that our School requires GRE scores for all applicants, even those students getting their Bachelor's degree from WSU. It is important for the student to study hard to get the best score possible as GRE scores are taken into consideration when reviewing a student's application for possible admission, and are often used when determining such things as Teaching and/or Research Assistant assignments.

6.4.4. Exceptions to Policy and Ten Percent Rule

The Higher Education Coordinating Board (HECB) is required by law to establish minimum requirements for admission to Washington's public baccalaureate institutions (RCW 28B.80.350). On April 11, 2001, the HECB adopted Resolution No. 01-18 that states in part that each of the six public baccalaureate institutions in Washington may admit no more than 10 percent of graduate and professional students using an alternative standard. This is nicknamed the Ten Percent Rule. This means the School of MME is limited by law as to how many students it can admit that do not meet the minimum admission requirements and require an exception to Graduate School policy. Some types of exceptions to policy are provisional admission for a low GPA or having a TOEFL score waived that is below the required minimum. Requests for exceptions to policy are made by the MME GSC to the Graduate School, and the Graduate School makes the final decision as to whether or not the request is granted.

6.5. Advanced Degree Seeking Graduate Students

Detailed information about the various classifications of graduate students can be found in the *GS PPM*. The Advanced Degree Seeking Student classification has two categories: regular admission and provisional admission. Basically, regular admission is for those students admitted to Graduate School with a cumulative GPA of 3.0 or higher in their previous course work. Provisional admission is for those students admitted to Graduate School with a cumulative GPA of 2.99 or lower in their previous course work.

6.5.1. Provisional Admission

As is stated in the *GS PPM*, provisional admission is granted through an exception to policy by the Dean of the Graduate School. Provisional admission may be granted for applicants whose academic record or test scores do not meet admission requirements, or for applicants who have not met all of the admission requirements or submitted all of the admission documents. Such applicants may be admitted provisionally to the Graduate School upon recommendation of the department chair or program director with approval by the Dean of the Graduate School.

Our School process for provisional admission is:

- 1. A MME faculty member must first agree to be the advisor for the student, and must make a recommendation for provisional admission to the Chair of the MME GSC (a student cannot make the request themselves).
- 2. The Chair of the MME GSC will review the student's situation and application material, and discuss the matter with the faculty member and any other pertinent faculty.
- 3. If it is decided that the student shows potential for success as a graduate student, the Chair of the MME GSC will recommend to the Graduate School that the student be given provisional admission.
- 4. The Dean of the Graduate School office will make the final admission decision. If admitted, the student's CGPA will be re-set at the start of their first semester of graduate study. The MME GSC will review their progress at the end of the first semester, and if they are making satisfactory progress towards their degree and they are able to achieve at least a 3.0 CGPA, then their status will automatically revert to that of a regular graduate student, and any course work taken will count towards their graduate program. If a provisionally admitted student falls below a 3.0 CGPA in their first semester of study, the program may choose not to reinstate the student. A student on provisional admission is not eligible for an assistantship unless their GPA is above 2.75 and such appointment has been approved by both the MME GSC and Graduate School.

6.6. Financing Your Education

6.6.1. Assistantships and Scholarships

We have two kinds of financial support available for students: a Research Assistantship (RA) and a Teaching Assistantship (TA). Most assistantships are available for full-time students on the Pullman campus starting in the fall semester. The number of openings varies from semester to semester and depends on the availability of funding. Competition for such support is very high. The students get an RA by directly contacting the faculty by email after their application file is complete. TA positions are usually awarded to current PhD students and cannot be applied for. Some scholarships are available but they can only be offered in conjunction with an assistantship to students who meet certain criteria. Once a student applies, the Graduate Academic Coordinator will inform the student of the assistantship process.

6.7. Students with Disabilities

As stated in the *GS PPM*, the Graduate School (and our School) is committed to providing equal opportunity in its services, programs, and employment for individuals with disabilities. Reasonable accommodations are available for students with a document disability. Students are responsible for initiating requests for reasonable accommodations and services that they need, http://accesscenter.wsu.edu.

6.8. Unsuccessful Applicants

Admission to graduate school is a competitive process. Because of limitations of faculty and facilities, it may be necessary to deny admission to a qualified applicant. In addition, a student may be recommended for admission for a specific semester, but when they update their application to another semester, they may be denied. Our School has the right to deny admission to any student, regardless of whether they meet the minimum admission requirements, and we are not required to provide a reason for the denial. All admission decisions are final. There is no appeal process for denied applicants.

6.9. Visa Problems

Our School policy follows university policy in that we will not get involved in student visa problems. No exceptions!

7. DISCLAIMER

This Graduate Student Handbook is a guideline for students in MME programs. In addition to MME requirements, policies, and procedures, students should follow the Graduate School requirements, policies, and procedures as outlined in the Graduate School Policies & Procedures Manual found at https://gradschool.wsu.edu/policies-procedures/.

8. ACADEMIC EVALUATION OF STUDENTS (ANNUAL REVIEW)

<u>Spring review</u>. In adherence with the *GS PPM*, our School (under the direction of the MME GSC) will conduct an annual review of all graduate students each spring semester, including students who have just begun that semester. The elements of the annual review include:

- 1. Student's name, program information, advisor, and committee members.
- 2. Cumulative graded coursework, and progress towards degree.
- 3. Qualitative assessment by advisor of student's progress in their program.
- 4. Statement as to the rate of progress, i.e., satisfactory or unsatisfactory.
- 5. Expectations for the next review period.

The Chair of the MME GSC and our School Director will give written notification to each graduate student of his/her performance, with suggestions for improvement where indicated. The review process and notification will normally be completed by April 15. If a student fails to turn in their completed Annual Review form by the deadline, or if it is felt that the student is not making satisfactory progress towards their degree, the MME GSC will consult with the student's advisor and possibly other faculty to decide what, if any, disciplinary action should be taken such as withholding future assistantship funding or even dropping the student from the program. See also the *Termination of Enrollment* section of this handbook.

<u>Fall review</u>. In addition to the spring review, our School (under the direction of the MME GSC) will conduct a short review of all graduate students in the fall semester, including students who have just begun that semester. This

review is just between the advisor and the MME GSC, unless the student needs disciplinary action. This review will enable our School to pinpoint earlier those students who are struggling academically or otherwise demonstrating unsatisfactory progress in their program.

9. GRADES, ENROLLMENT, AND REINSTATEMENT

9.1. Grades: Minimum Grade Point Average (GPA)

As stated in the *GS PPM*, the Graduate School has established a minimum 3.0 cumulative GPA and a 3.0 Program of Study GPA in order for a graduate student to be considered in good academic standing. In order to graduate, a student must have a minimum 3.0 cumulative GPA on both their WSU transcript and for courses listed on their Program of Study. It is the sole responsibility of the student to monitor their grades and take whatever action may be necessary to correct grade problems.

9.2. Grades: Incomplete

As stated in the GS PPM, "An incomplete ("I") is the term indicating that a grade has been deferred. It is given to a student who, for reasons beyond the student's control, is unable to complete the assigned work on time. The "I" grade for a graduate-level course (all courses numbered 500 and above) and an undergraduate course (all courses numbered 499 or lower) will be changed to an "F" if the work is not completed within one academic year following the semester in which the "I" grade was assigned, unless a shorter time is specified by the instructor. The student may not repeat the course to remove an incomplete grade. Graduate students may not graduate with an "I" grade on their transcript."

9.3. Grades: Research Credits and Policy on Unsatisfactory Grades

In order to make satisfactory progress toward their degree, a student needs to make continuous progress with their research efforts. For this reason, it is imperative that the student keep their advisor and committee members informed of their progress throughout each semester. Faculty will set expectations for each semester that a student is enrolled in research credits, and will provide an S (Satisfactory) or U (Unsatisfactory) grade at the end of the semester based on the student's performance in meeting those expectations. A student is expected to earn an S grade for all research credits. If a student does little or no research during a semester, or fails to keep in contact with their advisor about their research progress, it usually indicates they are not making satisfactory progress toward their degree, and they can be given a U grade. Graduate School policy is that if a student receives two U grades for research credits, they will be dismissed from the program.

9.4. Continuous Enrollment

The Graduate School requires that all full and part-time degree-seeking graduate students at all campus locations must maintain continuous enrollment in the Graduate School, registering for each academic semester from the time of first enrollment until all requirements for the degree are completed except for periods during which the student is on official graduate leave or emergency medical or family leave. Continuous enrollment is maintained by registering for a minimum of 2 graduate credits per semester (excluding the summer) (at least 1 of these credit hours must be of the appropriate 700- or 800-level research credit in order for the University to be able to document faculty and departmental efforts in graduate teaching), or by registering for continuous enrollment status (using a special schedule line number) at a reduced tuition rate (no credit is earned).

9.5. Continuous Enrollment: International Students

As stated on the International Programs web site at https://ip.wsu.edu/on-campus/f-1-students/overview, an international student must be enrolled full-time during the academic year (10 to 18 credits) in order to maintain legal status. In order to drop below a full course load (9 or fewer credits), one of the following issues must apply: academic difficulties, medical condition, graduate thesis (graduate students who have completed all course work and are only working on their thesis or dissertation), or students in the last semester of a degree program. International students desiring to enroll part-time during the academic year must obtain approval first (before enrolling) of their department, the Graduate School office, and the International Programs Office. This is done by completing the Reduced Course Load form that can be accessed by logging in at https://mypassport.wsu.edu. Please note that if the student is being paid on an assistantship (TA or RA), they must be enrolled full-time that semester (10 to 18 credits).

9.6. Continuous Enrollment: Continuous Doctoral Status (CDS)

As stated in the GS PPM, "Typically, doctoral students are able to complete their doctoral studies in a timely manner after completing their coursework and preliminary requirements. However, on occasion, doctoral students who have completed their coursework, preliminary exams and most of their research requirements do not have funding to continue to register for research credits; consequently, they must leave campus to finish their dissertation work. To meet the continuous enrollment requirement, doctoral students who have successfully completed their coursework and their preliminary exams and who DO NOT enroll for credit automatically will be placed into Continuous Doctoral Status. Students must complete their degree within three years of the date of the successful completion of their preliminary exam." Students who have an approved extension of their program deadline have certain enrollment requirements even if they are on CDS, see the GS PPM for more information. NOTE: Because international students are required to be enrolled fulltime, they will be out of compliance with SEVIS if they go on CDS and do not enroll, which means they will need to leave the country. It is highly recommended that they discuss their plans not only with their advisor but also with the International Programs office to make sure they stay in compliance with SEVIS.

9.7. Continuous Enrollment: Exceptions (Leave)

The Graduate School has two categories of official leaves of absence that are defined in the GS PPM.

9.7.1. Leave of Absence

Degree-seeking students in active status and in good academic standing who must be away from campus for reasons such as medical issues, family obligations, job obligations, military service, and Peace Corps service, and who cannot maintain continuous enrollment in any given semester, may apply for an official graduate leave of absence. See the *GS PPM* for the procedure to request this. Our School is willing to work with a student if they desire a leave of absence, as long as the leave is approved first. To initiate the leave request, the student must discuss the request with their advisor and, if the advisor approves it, then the advisor must discuss the request with the Chair of the MME GSC and, if the GSC Chair approves it, then the student should complete the Graduate School's Leave Form. Because of the uncertainty of financial aid, our School can't guarantee that if a student has an assistantship before the leave, that the assistantship will be available when they return from leave. If, during the time the student is on graduate leave, the student decides to transfer to another university, our School would have to provide a letter of release for the student to give to that university. This letter of release is commonly required by all universities from students who are transferring to another university after starting their graduate program but not completing it. If the student has received approval from the School as outlined above, our School almost always will provide this letter of release to the other university. However, if the student has not obtained the School's approval, then the School has a policy of not being willing to provide such a letter of release.

9.7.2. Internship Leave

As stated in the *GS PPM*, "Degree-seeking students who wish to go on an internship approved by their program and who do not need to register for credits for the internship may apply for internship leave status. Only internship leave required by the student's program is available to doctoral students in Continuous Doctoral Status." Please see the *GS PPM* for more information. To initiate the leave request, the student must discuss the request with their advisor and, if the advisor approves it, then the advisor must discuss the request with the Chair of the MME GSC and, if the GSC Chair approves it, then the student should complete the Graduate School's Internship Leave Form. The student is not required to register for credits but if they choose to do so, they should use our internship number of ME/MSE 600.

9.8. Part-time Enrollment

As stated previously, to maintain continuous enrollment, a graduate student must register for a minimum of 2 graduate credit hours per academic semester. At least 1 of these credit hours must be of the appropriate 700- or 800-level research credit in order for the University to be able to document faculty and departmental efforts in graduate teaching. An international student must be enrolled full-time during the academic year (10 to 18 credits) in order to maintain legal status, unless they have obtained permission to be enrolled part-time via the Reduced Course Load form.

9.9. Full-time Enrollment

The University considers a graduate student to be full-time if they carry an academic load of 10 to 18 credit hours per semester during the academic year (the Graduate School recommends an academic load of 10 to 12 credit

hours). International students must be enrolled full-time during the academic year (10 or more credits) in order to maintain legal status. Any student conducting research with an advisor is required to enroll in credits of 700, 702 or 800 commensurate with their research efforts. Research credits are to be determined by the student in consultation with their advisor, with one credit representing a minimum of 3 hours of research work each week during the academic semester. The required credit load must be maintained throughout the entire semester; therefore, no course may be dropped if the resulting course load would change the student's enrollment from full-time to part-time. Academic loads in excess of 18 credits are considered overloads and must have the approval of the student's advisor and the Dean of the Graduate School. Credit hours of enrollment in "audit" status are not included in calculating the student's academic load. Note: Graduate School policy is that 100- and 200-level Physical Education (PE) activity courses do not count toward the minimum 10 credit enrollment requirement.

9.10. Research Credits

The MME research credits are ME 700 (MS ME thesis), ME 702 (MS ME non-thesis), ME 800 (PhD ME), MSE 700 (MS MSE thesis), and MSE 702 (MS MSE non-thesis). Research credits are variable depending on the research effort by each student, and grading is Satisfactory/Unsatisfactory (S,U). It is Graduate School policy that every semester all full-time graduate students must enroll in a minimum of one credit hour of the appropriate research credit to document faculty and departmental efforts in graduate teaching. Credit is awarded for a grade of S; no credit is awarded for a grade of U. The S/U grade does not carry any quality points and is not calculated in the GPA. The award of an S grade does not imply acceptance of the final thesis or dissertation since such acceptance can only be made by the student's entire committee at the time of the final oral exam.

It should be noted that just because a student has a Research Assistant position for which he or she gets paid for 20 hours a week, the main purpose of the RA is to waive the student's tuition and to pay them a stipend to help with expenses. In reality, a student will need to perform research for as many hours as are necessary to get the research results needed so the student can graduate in a timely manner, and in almost all cases this will be well above 20 hours a week. See the section "Grades: Research Credits and Policy on Unsatisfactory Grades" for important information on performance expectations.

9.11. ME / MSE 701 Master's Independent Capstone Project and/or Examination

This course should be used by students in the MS ME or MS MSE Non-Thesis / Coursework-Only program. The credits are variable, and the grading is Satisfactory/Unsatisfactory (S,U).

9.12. Reinstatement: Probationary Continuing Enrollment

As stated in the *GS PPM*, "A graduate student who has completed his/her first semester of graduate study and earns a GPA between 2.75 and 2.99 is eligible for one additional semester of continued enrollment on a probationary status. Upon completion of the probationary semester, and thereafter until graduation, a minimum of a 3.0 cumulative GPA is required to continue in Graduate School. Probationary status is only available to students immediately following their first semester of graduate study." This means that if a student's cum GPA is between 2.75 and 2.99 at the end of their first semester, the Graduate School office will automatically reinstate them and send them a letter stating they must achieve a cum GPA of 3.0 by the end of their second semester in order to remain enrolled.

9.13. Reinstatement Policy

As stated in the GS PPM, "Reinstatement of a graduate student who falls below 2.75 GPA following completion of one semester or one summer session will be considered only through a petition from the graduate student to the program chair . . . and the chair may favorably recommend reinstatement for that student through a petition to the Dean of the Graduate School who has final approval. . . If approval to continue is granted, the student will have one semester or summer session to increase the cumulative GPA to 3.0. Failure to do so requires termination of enrollment in the program and in the Graduate School." REINSTATEMENT IS A SERIOUS MATTER!

To request reinstatement, the Graduate School requires a written memo from the department (in our School, the MME GSC handles this). A hold is placed on the student's registration until such time as the request for reinstatement is received and approved. It is the policy of our School that requests for reinstatement are not automatic but must be initiated by the student (the procedure is outlined below). The MME GSC will consider the student's reinstatement request on a case by case basis. If it is decided that reinstatement is warranted, it will consider requesting reinstatement only once for each student (with the exception of the first semester and, if

applicable, a probationary second semester). Exception from this policy will be considered by the MME GSC only if evidence of exceptional circumstance is submitted.

Reinstatement process:

- 1. <u>Student</u>. The student must initiate the reinstatement request using the Reinstatement Request form that can be obtained from the Graduate Academic Coordinator. The student must complete the form and then talk to their advisor about the request. This should be done as soon as possible after receiving notice of deficiency. If the student does not have a permanent advisor, they must talk with the Chair of the MME GSC. <u>Note</u>: The "plan of action" section is very important, and serious thought should be given as to how it is filled out. If the student became deficient because they received a grade of C- or below in a class, they must specify what their plan of action is for that course—are they going to re-take it and if so, when. If they are not going to re-take it, state why. If they fail to address their plan for that course, the Graduate School office will either ask the student to provide the information or they will deny the reinstatement request which means the student will be dropped from their program.
- 2. <u>Advisor</u>. The student's advisor must review the student's statement and plan of action listed on the Reinstatement Request form, and then must complete their own part of the form. The form includes a place for the advisor to state their approval and belief that the student will proceed towards their degree without further deficiency and in a timely manner.
- 3. MME GSC. The Chair of the MME GSC will review the statements and plan of action. If approved, the MME GSC will send written notification to the Graduate School stating that our School supports the student's request for reinstatement. The Dean of the Graduate School has final approval or denial.
- 4. If the student does not turn in the Reinstatement Request form in a timely manner or doesn't turn it in at all, or if the request is denied by our School or by the Graduate School, the student's enrollment will be cancelled and they will be dropped from the program.

9.14. Termination of Enrollment (Student Being Dropped from the Program)

All potential cases of termination of enrollment (i.e., a student being dropped from the program) must be brought before the MME GSC for discussion and decision. As stated in the *GS PPM*, "The enrollment of a graduate student will be terminated under any one of the following conditions: if student has a CGPA below 2.75 at the end of the first semester of study; if student has been provisionally admitted and has a CGPA below 3.0 at the end of the first semester of study; if student fails to establish and maintain a CGPA of 3.0 or above after more than one semester of study; if student has failed a preliminary or final exam for a second time; or if student has earned a U (Unsatisfactory) grade for research credits (700, 702, 800) for two semesters (including the summer term). Other reasons for termination might include failure to make normal progress toward degree completion (such as failure to complete coursework on time or multiple incompletes), failure to maintain continuous enrollment, issues related to academic integrity or student conduct, etc. Only the Dean of the Graduate School or the University Conduct Board has the authority to terminate a student's enrollment." Although the *GS PPM* says the enrollment of the student "will be" terminated, the Dean of the Graduate School will normally only do this based upon recommendation of the department (in our case, by the MME GSC after consultation with the student's advisor).

In our School, a student who fails to keep in regular contact with their advisor about their research progress and status will be deemed as not making satisfactory progress towards their degree, and the MME GSC will consult with the student's advisor and possibly other faculty to decide what, if any, disciplinary action should be taken. This may include the student being given a U grade for their research credits or even being dropped from the program. The MME GSC will give written notice to any student who is under consideration for being dropped from the program.

9.15. Reenrollment for a Degree-Seeking Student

As stated in the GS PPM, "A degree-seeking graduate student (who is not in Continuous Doctoral Status) who does not maintain continuous enrollment or who is not on approved graduate leave or internship leave status, and who is absent for one semester or two consecutive semesters (excluding the summer) must complete the Graduate School's Reenrollment Form before the student can register for classes." Reenrollment requires departmental approval and is not guaranteed, and our School reserves the right to deny the reenrollment request. In addition, there is no requirement that the previous advisor must continue on as advisor, i.e., the student must ask the faculty member whether or not they agree to act as advisor again, and the faculty member has the right to say no.

9.16. Readmission for a Degree-Seeking Student

As stated in the GS PPM, "A degree-seeking graduate student who fails to maintain continuous enrollment or approved graduate leave or internship leave, and who is absent for three or more consecutive semesters (excluding the summer) is required to reapply and pay an application fee to the Graduate School if he/she wishes to be considered for readmission to a program." Readmission requires departmental approval and is not guaranteed, and our School reserves the right to deny the readmission request. In addition, there is no requirement that the previous advisor must continue on as advisor, i.e., the student must ask the faculty member whether or not they agree to act as advisor again, and the faculty member has the right to say no.

10. MISCELLANEOUS

10.1. Signing of Official Graduate Documents

For all School of MME graduate programs, official documents must first be given to the Graduate Academic Coordinator, who will review them for compliance with our School and Graduate School requirements. If the document meets compliance, the coordinator will then get the signature of the Chair of the Graduate Studies Committee on the document, who signs instead of the department chair. The Graduate Academic Coordinator will then submit the document to the Graduate School via a special tracking process in myWSU.

10.2. Electronic Signatures on Graduate School Forms

The Graduate School office allows electronic signatures but only on certain documents. However, it is our School policy that original signatures are preferred except in exceptional circumstances.

11. PLAGIARISM POLICY

When writing papers and your thesis/dissertation, be mindful that plagiarism is a serious offense. Information about what constitutes plagiarism can be found at http://www.wsulibs.wsu.edu/plagiarism.

Intentional plagiarism is where the author knowingly appropriates the work of others and passes it off as their own. This can include:

- copying entire documents and presenting them as your own;
- cutting and pasting from the work of others without properly citing the authors;
- stringing together the quotes and ideas of others without connecting their work to your own original work;
- asserting ideas without acknowledging their sources, reproducing sentences written verbatim by others without properly quoting and attributing the work to them;
- making only minor changes to the words or phrasing of another's work, without properly citing the authors.

Any concerns regarding plagiarism should be brought to the attention of the Chair of the MME GSC, who will handle all such matters confidentially.

11.1. Academic Dishonesty and Plagiarism—who should report it and how

Academic integrity policies and resources can be found at http://academicintegrity.wsu.edu. Students and faculty share in the responsibility of upholding and protecting academic honesty standards within the University. As stated in the GS PPM, "In the event that a graduate student becomes aware of any incidents of academic dishonesty, the graduate student should report the incident to the appropriate faculty member. The faculty member is then responsible for contacting the Office of Student Standards and Accountability for appropriate due process to determine whether a violation took place and the sanction(s) to be imposed. Sanctions imposed may include failure of the class or dismissal from the graduate program. Cases of academic dishonesty may also be reported to the Graduate School." Faculty can find a reference guide on the above-mentioned web site for how to respond to academic integrity violations.

12. Advisors and Research Committee

12.1. Temporary Advisor

Our School expects new students to have an advisor determined by the end of their first semester. In the interim, the Chair of the MME GSC (or their assignee) will act as the student's temporary advisor. The temporary advisor will help the student choose which courses to enroll in their first semester, and offer suggestions as to which faculty member might make a good permanent advisor based on the student's research interests. It is the student's responsibility to talk to the faculty and determine a permanent advisor.

12.2. Policy Regarding Failure to Find Permanent Advisor by End of First Semester

In order to graduate, a student is required to perform research on a project, and the results are presented at the end of the student's program in the form of an oral exam and a written thesis, project report, or dissertation. The advisor is the one who will assign the research project to the student and who will monitor the student's research efforts. If a student does not have an advisor determined by the end of their first semester, and hence is not starting to work on a research project, then they are not making satisfactory progress towards their degree. Our School policy is that if the student has not determined a permanent advisor by the end of their first semester, they will automatically be given a U (unsatisfactory) grade for their research credits. If the student has still not determined an advisor by the end of their second semester, they will be given another U grade for their research credits. Graduate School policy is that when a student receives two U grades, they are subject to dismissal from the program.

12.3. Permanent Advisor and Research Topic (Master's Thesis and PhD Programs)

A permanent advisor for students in our research programs is identified by agreement between the student and an individual faculty member. As mentioned above, the student must determine their permanent advisor by the end of the student's first semester of study. The student and advisor jointly identify a research topic that is compatible with the student's interests and goals. During the second semester of study, the student and their permanent advisor should determine the research committee and then submit the Program of Study.

12.4. Permanent Advisor (Master's Non-Thesis / Coursework-Only Program)

See the section "Master's Degree Program (Non-Thesis / Coursework-Only)".

12.5. Research Committee (Master's Thesis Program)

The purpose of the research committee is to mentor and guide the student on their research project. Our School's Graduate Program Bylaws govern who can serve on graduate student committees and how they can serve, and defines the process needed to approve them to be able to serve.

As stated in our Graduate Program Bylaws, the master's committee must include at least three members, one of which is the student's advisor who acts as Chair of the Committee. At least one of these members must be both a permanent WSU tenure-track faculty member and a member of the MME Graduate Faculty. If a non-WSU person is desired to serve on the committee (such as a person from industry), see the section Research Committee—External Committee Member.

12.6. Research Committee (Master's Non-Thesis / Coursework-Only Program)

See the section "Master's Degree Program (Non-Thesis / Coursework-Only)".

12.7. Research Committee (PhD Program)

As stated in our Graduate Program Bylaws, the doctoral committee must include at least three members, one of which is the student's advisor who acts as Chair of the Committee. At least two of these members must be both a permanent WSU tenure-track faculty member and a member of the MME Graduate Faculty. If a non-WSU person is desired to serve on the committee (such as a person from industry like PNNL), see the section Research Committee—External Committee Member.

12.8. Research Committee—External Committee Member

For a Master's committee, the Graduate School policy allows a person who has a PhD degree and who is not associated with WSU in any way (such as a person from industry) to potentially serve on a graduate student's committee as one of the three committee members (they cannot serve as committee chair or co-chair). If not

previously approved, the person must be approved to serve following the process outlined in our Graduate Program Bylaws. To start the process, the student and person outside of WSU must complete the Graduate School's External Committee Member Request form, see https://gradschool.wsu.edu/documents/2016/08/external-member-request.pdf/. The completed form, along with the person's CV, should be given to the Graduate Academic Coordinator who will then continue with the approval process as outlined in our Graduate Program Bylaws.

For a PhD committee, the Graduate School policy allows a person who has a PhD degree and who is not associated with WSU in any way (such as a person from industry) to potentially serve on a graduate student's committee, but they are only allowed to serve as a fourth, external committee member (they cannot serve as committee chair or cochair). To start the process, the student and person outside of WSU must complete the form, etc., as mentioned for the Master's committee.

12.9. Research Committee and Program of Study Form (Master's Thesis and PhD Programs)

Once the student and his or her advisor have come up with some names of potential committee members, the student should ask their consent to serve on the committee. If there is a question as to whether or not a certain person is allowed to serve on a graduate committee as outlined in our Graduate Program Bylaws, please check with the Graduate Academic Coordinator. The final committee members should be listed on the Graduate School's Program of Study Request form along with the coursework required to fulfill the program requirements. For more information, see the section Program of Study and Coursework. Our School policy is that the Program of Study form must be submitted in the student's second semester of study. If the form is not submitted in a timely manner, the student is considered as not making satisfactory progress towards their degree, and risks being given an Unsatisfactory grade for their research credits. Graduate School policy is that if a student receives two U grades for research credits, they will be dropped from the program.

12.10. Research Committee and Program of Study (Master's Non-Thesis / Coursework-Only Program)

See the section "Master's Degree Program (Non-Thesis / Coursework-Only)".

12.11. Responsible Conduct of Research Training

WSU's Office of Research and the Graduate School office requires all graduate students to complete the Responsible Conduct of Research online training before or during their first semester as a graduate student, see http://www.ora.wsu.edu/rcr/rcrtraining.asp. Even if a student is not involved in research at the present time, the training must be taken as it applies to all areas of the Program of Study, including instruction and research through to the thesis/dissertation process. Refresher training must be completed once every three years.

12.12. Discrimination, Sexual Harassment, and Sexual Misconduct Prevention Training

The University requires all graduate students to take this training. This is a web based training located at http://hrs.wsu.edu/dshp.

12.13. Expectations of Faculty Advisors and Mentors

As stated in the GS PPM, "Departments and programs are responsible for encouraging and ensuring effective mentorship for graduate students during the course of their studies. A mentor assists scholarly development, contributes to intellectual stimulation, and fosters professionally enriching relationships with graduate students. A faculty mentor is a peer-to-be, one who encourages and supports independent development; one who, through insightful guidance, trust, and mutual respect, nurtures a rapid transition from graduate student to colleague. Students should expect that mentors will interact with them on a regular basis, providing the guidance, advice, and intellectual challenge necessary to help students complete their degree programs. Graduate students should expect that advisors and mentors will do the following:

- Interact in a professional and civil manner consistent with University policies governing nondiscrimination and sexual harassment.
- Create an ethos of collegiality in classroom, laboratory, or studio supervisory relations that stimulates and encourages students to learn creatively and independently.
- Develop clear understandings about specific research expectations and responsibilities, including timelines for completion of theses or dissertations.
- Provide verbal or written comments and evaluation of students' work in a timely manner.

- Discuss laboratory, studio, or departmental authorship policy with graduate students in advance of entering into collaborative projects.
- Acknowledge student contributions to research presented at conferences, in professional publications, or in applications for copyrights and patents.

13. PROGRAM OF STUDY AND COURSEWORK

13.1. Program of Study Request Form and Its Submission

The Program of Study Request is an official form where the student will declare their coursework for their entire program. Please see the information below about selection of coursework. The completed, signed Program of Study Request Form should be submitted to the Graduate Academic Coordinator for review by the Chair of the MME GSC and subsequent submission to the Graduate School. Approval of the Program of Study, and any subsequent changes to it, shall be determined jointly by the student and the student's advisor, with subsequent approval by the Chair of the MME GSC, with final approval by the Dean of the Graduate School. As mentioned previously, our School policy is that the Program of Study form must be submitted in the student's second semester of study. If the form is not submitted in a timely manner, the student is considered as not making satisfactory progress towards their degree, and risks being given an Unsatisfactory grade for their research credits. Graduate School policy is that if a student receives two U grades for research credits, they will be dropped from the program.

13.2. Selection of Courses

Unlike the undergraduate program, the graduate program does not have a set list of courses that the student must take although, of course, there are general program requirements for each degree (see the Programs and Course Requirements section of this handbook). The student's advisor, in consultation with the committee members, should aid the student in the development of their proposed Program of Study, making sure it adheres to the program requirements. This can only be done properly if the student communicates with the advisor regarding areas of interest, goals, and plans for the future. If a student has a definite goal in mind, it is often possible to design the program around that goal.

As indicated previously, the Program of Study must contain the student's plan for courses to take throughout their entire graduate program (i.e., courses already taken since starting their graduate program, courses currently being taken, and anticipated future courses). For determining which courses are available in the future, the student should refer to the School's Graduate Course Offerings list found at https://mme.wsu.edu/documents/2017/05/graduate-schedule-of-courses.pdf (nicknamed the Five Year Plan). The courses on the list are subject to change because of things that can't be anticipated such as instructor unavailability, low enrollment, etc. To change courses listed on an approved Program of Study, please see the Revisions to the Program of Study section of this handbook.

13.3. Graded Coursework, Pass/Fail Courses, and Audited Courses

All programs require a minimum number of credit hours of graded coursework. Graduate School policy is that graded courses of "C" or higher can be included on the Program of Study, and the student must maintain a minimum CGPA of 3.0 for all courses listed. For questions about grades of "B-" or below, see the section Repeating a Course. A student can choose which graded courses to list on their Program of Study, as there is no requirement that they have to list all courses taken.

A pass/fail course or an audited course is not considered as being a graded course. Such courses do not count towards fulfilling the required minimum number of credit hours of graded coursework. An audited course is normally not included on the Program of Study. If desired, a pass/fail class or audited class can still be included on the Program of Study under the section "Coursework recognized by the committee but cannot count toward degree's requirements."

13.4. 100- and 200-level Courses

It is Graduate School policy that 100- and 200-level courses cannot be applied towards a graduate program. It is also their policy that 100- and 200-level Physical Education (PE) activity courses <u>cannot</u> count toward the minimum 10 credit fulltime enrollment requirement.

13.5. 300- and 400-level Courses, Seminar, and non-MME Courses

For 300- and 400-level courses, the university's myWSU system will automatically block a graduate student from enrolling in an undergraduate course, commonly giving the error message "prerequisites not met". To enroll, the

graduate student must contact the department offering the undergraduate course, and ask them to manually enroll the graduate student in the undergraduate course.

For seminar courses, each of our programs requires that the student take a certain number of seminar credits (ME 598 or MATSE 593). As stated in the PhD ME program requirements, seminar credits taken at the Master's level cannot be used towards fulfilling the PhD requirement, and they should <u>not</u> be listed on the PhD ME Program.

For non-MME courses, a certain number of them can be taken as long as they fit into the degree program requirements (see the Summary of Programs and Course Requirements section of this handbook).

13.6. Repeating a Course

The GS PPM states, "No graded courses of "B-" or below may be dropped from a Program of Study for an advanced degree nor can a course be repeated for a higher grade if the final grade is "C" or higher. Any course listed on the Program of Study for which a grade of "C-" or below is earned must be repeated for a letter grade, not on a Pass/Fail basis." If the student has listed a course on their Program of Study and received a grade for it of "C-" or below, and if the student has not repeated the course and earned a higher grade by the time of their final defense, the student will not be allowed to graduate. As stated in a previous section, graduate students may also not graduate with an Incomplete ("I") grade on their transcript.

13.7. Cumulative GPA for Graduation

In order for a student to be awarded a graduate degree, the Graduate School requires that the student must have 1) a minimum cumulative GPA of 3.0 on their transcript and 2) a minimum cumulative GPA of 3.0 for the courses listed on their Program of Study. It is the sole responsibility of the student to monitor their grades and take whatever action may be necessary to correct grade problems.

When courses reserved for graduate credit are listed on the student's Program of Study, the grades received are included when determining the Program of Study cumulative GPA. However, the grades are not used when determining the student's graduate transcript cumulative GPA because the grades can only be used once and they have already been used for the undergraduate degree.

13.8. Revisions to the Program of Study

It is not uncommon that a Program of Study must be revised to drop or add a course. To make revisions the student must use the Change of Program form found at https://gradschool.wsu.edu/facultystaff-resources/18-2. The completed, signed Change of Program form should be submitted to the Graduate Academic Coordinator for review by the Chair of the MME GSC and subsequent submission to the Graduate School. Upon scheduling of the final exam, the Graduate School will review the student's program and will send the student a "to-do" list instructing the student of changes (if any) that need to be made to the program before graduation will be approved.

13.9. Transfer Course Policy

There are two transfer course policies that must be adhered to:

- 1. The Graduate School policy, found at https://gradschool.wsu.edu/documents/2015/09/transfer-policy.pdf.
- 2. The School of MME Transfer Course Policy and Process. Please ask the Graduate Academic Coordinator for a current copy of this policy and process. It is important to remember that each degree level has a time limit for completion of the degree. Attempting to transfer old coursework may cause the student to go beyond the time limit, and in that case the Graduate School office will deny the transfer. In addition, because old coursework may not be especially useful to the student in their current program, it is our department policy not to allow the inclusion of old coursework on the Program of Study unless the advisor can provide justification that must be approved by our Graduate Studies Committee with final approval by the Graduate School office.

13.10. Time Limit for Completion of Degree

Each degree level has a time limit for completion of the degree (see the *GS PPM* for more details). Our School will follow the *GS PPM* procedure for a student's request for an extension of a program deadline.

- Most students in a master's degree program require two to three years for completion of their program. The maximum time allowed for completion of a master's degree is six years from the beginning date of the earliest course applied toward the degree on the Program of Study (this includes any transfer courses).
- Most students in a doctoral degree program require four to six years for completion of their program. The
 maximum time allowed for completion of a doctoral degree is ten years from the beginning date of the
 earliest course applied toward the degree on the Program of Study (this includes any transfer courses). In
 addition, the doctoral degree must be completed within three years of the date of the satisfactory
 completion of the preliminary examination.

13.11. Extension of Degree Program Deadline

As indicated in the GS PPM, extensions of a program deadline are made on a year by year basis. This is our School's procedure to request an extension of a degree program deadline:

- 1. <u>First Extension</u>. A one-year extension may be requested as an exception to Graduate School policy as follows: 1) the student must make a written request to their thesis/dissertation chair (advisor), and the advisor and student must come up with a written timeline for completion within one year, then 2) the advisor must submit the student's written request and timeline to the Chair of the MME GSC, indicating the reason for his/her support of the request, then 3) the Chair of the MME GSC will review it and present the request/timeline to the GSC for vote at their next meeting, then 4) if the GSC votes to support the request/timeline, the Chair of the MME GSC will submit the request/timeline to an Associate Dean of the Graduate School office, indicating that the advisor and the MME GSC has voted to support the request, then 5) the Associate Dean will review the request, and grant or reject it. Note: A student who has been granted a first extension of their program deadline must be enrolled for a minimum of two research credits during either the fall or the spring semester of that extension period, and must be enrolled in a minimum of two research credits during the semester that they conduct their final exam.
- 2. Second Extension. If, after having been granted a first extension, a second extension for one year may be requested using the following procedure. The second extension is a serious matter and should be considered a final stage of the process to complete the degree: 1) the student must make a written request to their thesis/dissertation chair (advisor), and the advisor and student must come up with a written timeline for completion within one year, then 2) the advisor must submit the student's written request and timeline to the Chair of the MME GSC, indicating the reason for his/her support of the request, then 3) the Chair of the MME GSC will review it and present the request/timeline to the GSC for vote at their next meeting, then 4) if the GSC votes to support the request/timeline, the Chair of the MME GSC will present the request/timeline to the faculty for vote at their next meeting, then 5) if the faculty votes to support the request/timeline, then the Chair of the MME GSC will submit the request/timeline to an Associate Dean of the Graduate School office, indicating that the advisor, the MME GSC, and the faculty have voted to support the request, then 6) the Associate Dean will review the request, and grant or reject it. Note: A student who has been granted a second extension of their program deadline must be enrolled for a minimum of two research credits during the fall semester and the spring semester of that extension period, and must be enrolled in a minimum of two research credits during the semester that they conduct their final exam.
- 3. <u>Third Extension</u>. Our School and the Graduate School office highly discourage third extensions, and for that reason third extensions are only granted for very exceptional circumstances, such as a personal medical issue, and the MME GSC will only consider these on a case by case basis. See the *GS PPM* for more information. Please contact the Graduate Academic Coordinator for the process to request a third extension of the program deadline.

13.12. WSU/University of Idaho Cooperative Course Program

The WSU/UI Cooperative Course Program between WSU and the University of Idaho provides an opportunity for students at each university to take graduate and undergraduate coursework at the other university toward their degree program. Degree-seeking graduate students at WSU and UI may participate in the Cooperative Course Program through a simple registration and enrollment process developed jointly by the Registrar's Office at each university. Students are charged tuition at their home institution, and the student credit hours taken at the cooperative institution count toward their enrollment hours at their home institution for billing and financial aid purposes, see http://schedules.wsu.edu/Coop.

14. MASTER'S DEGREE PROGRAM (THESIS)

14.1. <u>Dual Master's Degree Programs (internal to WSU)</u>

Upon special request, the University may allow dual master's degree programs if they are internal to WSU. A dual master's degree program allows a graduate student to concurrently enroll in two master's degree programs so that the student may complete both degrees simultaneously or in less time than is required to complete the two degrees if taken sequentially. Additional information and specific requirements of the program can be found in *GS PPM*. Before our School will consider the request, 1) the student must have talked with and obtained the permission of their advisor in both programs, and 2) the Graduate Studies Committee of both programs must support the request.

14.2. MS in Mechanical Engineering (Thesis)

14.2.1. Program Requirements for MS ME

A Master of Science program in Mechanical Engineering requires a minimum of 30 credit hours approved by the Graduate School. See the *Summary of Programs and Course Requirements* and *Program of Study* sections of this handbook. The general University program requirements can be found in the *GS PPM*.

14.2.2. Timing of the program for MS ME

The general timing of what should occur during each semester of a student's program can be found in the *School of MME Milestones* section of this handbook. It is important that the student refer to the Milestones throughout their program to make sure they stay on target with MME deadlines. In addition, the student should review the Graduate School's *Deadlines and Procedures for Degree* to make sure they stay on target with Graduate School deadlines (see https://gradschool.wsu.edu/facultystaff-resources/18-2).

14.2.3. Thesis option and thesis instructions for MS ME

The thesis option is encouraged for all full-time students, especially those continuing on to the PhD.

<u>Writing and distribution</u>. It can and usually does take many months to write a good thesis or dissertation. The student is encouraged to begin writing at least six months (preferably longer) before they intend to take their final exam, and is encouraged to show their progress to their advisor and/or research committee to obtain feedback on format/content. In writing it, the student must follow the format outlined in the Graduate School's *Dissertation/Thesis Submission Guidelines and Formatting Requirements* found at https://gradschool.wsu.edu/documents/2014/12/dissertation-and-thesis-submission-guidelines.pdf.

<u>Defense of the thesis</u>. This is called the Final Exam, and includes a written element (the written thesis) and an oral element (an oral defense of the thesis). See the *Final Examination* section of this handbook.

Graduate School copies. The final thesis or dissertation needs to be submitted to the Graduate School 1) in nearly final form at the time the Scheduling form is submitted so it can be checked for format and 2) in final form after the exam is over following the directions on their *Deadlines and Procedures for Degree* found at https://gradschool.wsu.edu/facultystaff-resources/18-2/. After the exam is over and the document has been finalized, the student must also submit a hard copy (on 100% cotton paper) of the title page, abstract, and signed signature page only (not the entire document) to the Graduate School office (French Ad room 324) along with their other required forms. The Graduate Academic Coordinator has 100% cotton paper that you can use for this purpose.

<u>School of MME copy</u>. Our School does not require the student to provide us with a hard copy either before or after the final exam. However, the student should check with their advisor as to whether the advisor wants the student to provide them with a hard copy of the final version.

<u>Distribution deadlines</u>. Both the School of MME and the Graduate School have deadlines for receipt of the various stages of the thesis or dissertation. It is imperative that the student review these deadlines as set forth in the *School of MME Milestones* and Graduate School's *Deadlines and Procedures for Degree*. It is the student's responsibility to have the thesis typed, copied, and distributed as required.

14.2.4. Final Examination for MS ME

The final examination and the policies regarding it are discussed in the GS PPM. As discussed in the GS PPM, a final examination is required of all master's candidates (both thesis and non-thesis) and doctoral candidates. This examination is intended to test the candidate's ability to carry out a critical dialogue integrating and interpreting material in the major and supporting fields with emphasis on the work presented in the thesis. The distribution of the

thesis and the scheduling of the thesis defense require following a strict timeline. See the *School of MME Milestones* as well as the Graduate School's *Deadlines and Procedures for Degree* for these timelines.

<u>Final Exam Scheduling form, and Graduate Student Exit Survey.</u> The student and their advisor must sign and submit a Graduate Student Exit Survey form at the same time as the Final Exam Scheduling form. The Chair of the MME GSC will not sign the Scheduling form until the Exit Survey has been received. Please ask the Graduate Academic Coordinator for a current copy of the Exit Survey document.

<u>Thesis/project report/dissertation copies</u>. Copies of the thesis/project report/dissertation must be furnished to all members of the candidate's committee at least one week before the final examination. If the student does not submit it in a timely manner, the committee reserves the right to cancel the exam.

<u>Exam duration.</u> The student and committee should allow around two hours for the exam, but per Graduate School policy the exam should not exceed two and one-half hours.

Exam time and location. Final examinations must be held during regular working hours (8:00am-5:00pm, Monday-Friday) of an academic session in an academic environment either on the Pullman or branch campus. This means the final exam should not start before 8:00am nor end after 5:00pm. Final exams are not allowed to be held on weekends or holidays or during finals week. If held over Academic Media Services (AMS), at least one committee member must be physically present in the room with the student.

<u>Scheduling the room.</u> Please discuss scheduling the room with the Graduate Academic Coordinator. The student should reserve the room a half hour or an hour before the exam starts in order to allow time to become familiarized with the equipment.

<u>Exam notification</u>. All final exams are open to the public, meaning that anyone can attend them. After the Graduate School provides notification of the date of the exam, the Graduate Academic Coordinator will announce the exam to MME faculty and graduate students.

14.2.5. Final Examination for MS ME: Failed

As stated in the GS PPM, in the event of a failed examination, an Unsatisfactory grade will be recorded for that semester's 700, 702 or 800 credits. Upon approval of the student's committee, a second and final attempt may be scheduled after a lapse of at least three months. When scheduling for a second exam, the scheduling form must be submitted at least 15 working days in advance of the exam day. A member of the Graduate Mentor Academy will be appointed by the Graduate School and must be present for a re-examination. The entire committee must be present and vote. A student who has failed two examinations (and hence received two U grades for research credits) will be terminated from the Graduate School.

14.3. MS in Materials Science & Engineering (Thesis)

14.3.1. Program Requirements for MS MSE

A Master of Science program in Materials Science and Engineering requires a minimum of 30 credit hours approved by the Graduate School. See the *Summary of Programs and Course Requirements* and *Program of Study* sections of this handbook. The general University program requirements can be found in the *GS PPM*.

14.3.2. Timing of the program for MS MSE

This is the same as for the MS ME.

14.3.3. Thesis option and thesis instructions for MS MSE

This is the same as for the MS ME.

14.3.4. Final Examination for MS MSE

This is the same as for the MS ME, with one exception. If the student has been pursuing their MS MSE program at the Tri-Cities campus, they must arrange for AMS for their final exam so that people at the Pullman campus have the opportunity to attend as well as people at the Tri-Cities campus. This is a Graduate School requirement since the MS MSE program is Pullman-based.

14.3.5. Final Examination for MS MSE: Failed

This is the same as for the MS ME.

14.4. MS Program (Interdisciplinary Degrees)

See PhD Program (Interdisciplinary Degrees).

15. MASTER'S DEGREE PROGRAM (NON-THESIS / COURSEWORK-ONLY)

15.1. MS in Mechanical Engineering (Non-Thesis / Coursework-Only)—INTO Pathway

WSU partners with INTO through their Pathway program. This program is ideal for international students who need additional English language and academic preparation before continuing to a graduate degree program at a U.S. university. The INTO Pathway students begin at WSU as non-degree seeking, taking WSU courses and English language training, and are provided with social and academic support services. In order to progress to a regular graduate program, the student must first meet all of the Pathway requirements as well as the minimum admission requirements of the graduate program they are seeking.

To progress to our graduate program, the Pathway student must have 1) a minimum CGPA of 3.0, and 2) a minimum GRE Quantitative Reasoning score of 150. The GRE Verbal Reasoning score is not taken into consideration since the student is receiving English language training in the Pathway program. Our department is annually accepting up to 20 MS ME Pathway students and up to 10 MS MSE Pathway students.

These students must follow the MS Non-Thesis / Coursework-Only program. They are automatically assigned the Chair of the MME Graduate Studies Committee as their permanent advisor. The Chair will advise them on which courses to enroll in and will mentor them throughout their graduate program. Students in this program are not allowed to change advisors.

The student is admitted based on the understanding that they will pursue the coursework-only option throughout their entire program, and for this reason they are not allowed to change to the thesis option at any time. If a coursework-only student wishes to apply for a PhD following completion of their MS, they are welcome to do so.

15.2. MS in Mechanical Engineering (Non-Thesis / Coursework-Only)—INTO Direct

WSU also partners with INTO through their Direct program. An INTO Direct student who applies for admission to our MS ME (coursework-only) program through regular channels will be automatically admitted if they meet certain minimum admission requirements. These requirements are 1) a minimum CGPA of 3.2, 2) a minimum GRE Quantitative Reasoning score of 153, and 3) a minimum GRE Verbal Reasoning score of 147. If they do not meet these minimum admission requirements, they may be denied admission.

These students must follow the MS Non-Thesis / Coursework-Only program. They are automatically assigned the Chair of the MME Graduate Studies Committee as their permanent advisor. The Chair will advise them on which courses to enroll in and will mentor them throughout their graduate program. Students in this program are not allowed to change advisors.

The student is admitted based on the understanding that they will pursue the coursework-only option throughout their entire program, and for this reason they are not allowed to change to the thesis option at any time. If a coursework-only student wishes to apply for a PhD following completion of their MS, they are welcome to do so.

15.3. MS in Mechanical Engineering (Non-Thesis / Coursework-Only)—regular applicant

A student who applies for admission to our MS ME (coursework-only) program through regular channels will be automatically admitted if they meet certain minimum admission requirements. These requirements are 1) a minimum CGPA of 3.2, 2) a minimum GRE Quantitative Reasoning score of 153, and 3) a minimum GRE Verbal Reasoning score of 147. If they do not meet these minimum admission requirements, they may be denied admission.

These students must follow the MS Non-Thesis / Coursework-Only program. They are automatically assigned the Chair of the MME Graduate Studies Committee as their permanent advisor. The Chair will advise them on which courses to enroll in and will mentor them throughout their graduate program. Students in this program are not allowed to change advisors.

The student is admitted based on the understanding that they will pursue the coursework-only option throughout their entire program, and for this reason they are not allowed to change to the thesis option at any time. If the coursework-only student wishes to pursue a MS thesis program which would allow them to conduct research, they must apply to the MS thesis program through regular channels, and they would be considered for admission just like

any other applicant to the program. If a coursework-only student wishes to apply for a PhD following completion of their MS, they are welcome to do so.

15.4. Structure of ME 701 / MSE 701

The ME 701 / MSE 701 course is called Master's Independent Capstone Project and/or Examination. This course is required for students in our Non-Thesis / Coursework-Only program. The capstone project requirement can be satisfied by the student serving as a teaching associate for a faculty member teaching an undergraduate class in their final semester. The teaching associate will achieve required mastery by 1) conducting tutorials or recitations for the same undergraduate class, 2) advising individual students through tutorial/office hours, and 3) assisting the professor with assessments in the class.

15.5. Committee and Program of Study (Non-Thesis / Coursework-Only)

As stated in our Graduate Program Bylaws, the master's committee must include at least three members, one of which is the student's advisor who acts as Chair of the Committee. The Chair of the MME Graduate Studies Committee is automatically assigned to act as the student's advisor. He or she will determine the other two members of the committee when it comes time for the student to file their Program of Study in their second semester of study.

15.6. Balloted evaluation

Towards the end of the student's final semester, the committee will conduct a balloted evaluation of the student's completion of the capstone project. Only the committee members will attend this evaluation (not the student and not the public).

15.7. MS in Materials Science & Engineering (Non-Thesis / Coursework-Only)

The MS MSE (Non-Thesis / Coursework-Only) follows the same guidelines as for the MS ME (Non-Thesis / Coursework-Only).

16. PHD PROGRAM

16.1. Program Requirements for PhD ME

A PhD program in Mechanical Engineering requires a minimum of 72 credit hours beyond the Bachelor's degree including graded coursework and dissertation research. See the *Summary of Programs and Course Requirements* and *Program of Study* sections of this handbook. The general University program requirements can be found in the *GS PPM*. The curriculum for the PhD degree will be tailored to each student taking into account previous training and areas of strength. Courses will be drawn from the current School of MME offerings and from those of the remainder of the College and University as appropriate.

16.2. Graduate Minor for PhD ME

As discussed in the GS PPM, a limited number of approved graduate minors are available to WSU doctoral students, such as a graduate minor in Statistics. Graduate minors are not required by the Graduate School nor are they required by our School. A student interested in getting a minor should discuss this option with their advisor. Requirements for approved graduate minors are contained in the GS PPM.

16.3. Timing of the Program for PhD ME

The general timing of what should occur during each semester of a student's program can be found in the *School of MME Milestones* section of this handbook. It is important that the student refer to the Milestones throughout their program to make sure they stay on target with MME deadlines. In addition, the student should review the Graduate School's *Deadlines and Procedures for Degree* to make sure they stay on target with those deadlines.

16.4. Qualifying Examination for PhD ME

At this time, our School does not require a qualifying examination.

16.5. Preliminary Examination for PhD ME

The preliminary examination and the policies regarding it are discussed in the GS PPM. The preliminary exam may be scheduled only after the Program of Study has been approved, a substantial portion of the required coursework has been completed (six or fewer graded credits remaining to take), and when the student and committee chair believe the student is prepared for the examination. As stated in the GS PPM, the student must be registered for a

minimum of 2 credit hours of ME 800 as a regular graduate student at the beginning of the semester or summer session in which the preliminary examination is to be taken, and have at least a 3.0 cumulative GPA on the student's transcript and at least a 3.0 cumulative GPA in the graded coursework on the Program of Study. A minimum of four months must elapse between the successful completion of a preliminary examination and the scheduling of a final examination. Because of the four months policy, the preliminary exam cannot be taken in the same semester that the final exam is taken.

The School of MME's belief is that the purpose of the preliminary examination is to determine if the student has the technical background and ability to pursue an independent research project. In our School, the exam consists of two parts: 1) a written element (the research proposal) and 2) an oral element (an oral defense of the research proposal and the student's area of specialization).

- 1. Research proposal. The research proposal typically follows the format of the thesis/dissertation writing guidelines, in which case it would include an abstract, a description of the proposed research, a budget (if appropriate), a time schedule, and a resume. However, the committee may prefer that it follow another format such as one to match NSF guidelines, in which case it would probably just include the proposal summary and narrative. The student should check with their committee as to what format is preferred. The proposal should generally not exceed 15 single-spaced pages. The student must give a hard copy or electronic version to their advisor and committee at least one week before the prelim exam so they have time to review it before the exam. If the committee does not receive it in a timely fashion, they reserve the right to cancel the exam. After the exam is over, the student should check with their advisor as to whether they want a hard copy of the proposal. If they do, the student should ask how they would like it bound. Popular ways of binding include spiral-bound or putting it in a 3-ring binder.
- 2. <u>Oral examination</u>. The oral portion of the preliminary exam focuses on the research proposal and the student's area of specialization.

<u>Exam duration</u>. The student and committee should allow around two hours for the exam, but per Graduate School policy the exam should not exceed two and one-half hours.

Exam time and location. Preliminary examinations must be held during regular working hours (8:00am-5:00pm, Monday-Friday) of an academic session in an academic environment either on the Pullman or branch campus. This means the exam should not start before 8:00am nor end after 5:00pm. Final exams are not allowed to be held on weekends or holidays.

<u>Scheduling the room</u>. Please discuss scheduling the room with the Graduate Academic Coordinator. The student should reserve the room a half hour or an hour before the exam starts in order to allow time to become familiarized with the equipment.

<u>Exam notification</u>. A preliminary exam can either be open (meaning that anyone from the public can attend it) or closed (meaning that only the student and his or her committee can attend it). The student's committee decides whether the exam should be open or closed. If they decide that the exam will be open, after the Graduate School provides notification of the date of the exam, the Graduate Academic Coordinator will announce the exam to MME faculty and graduate students.

16.6. Preliminary Examination for PhD ME: Failed

As stated in the GS PPM, in the event of a failed preliminary examination, an Unsatisfactory grade will be recorded for that semester's 800 credits. Upon approval of the student's committee, the student will be allowed to be reexamined for a second and final attempt. At least three months must lapse between a failed examination and a reexamination. When scheduling for a second exam, the scheduling form must be submitted at least 15 working days in advance of the exam day in order to allow time for a member of the Graduate Mentor Academy to be appointed by the Graduate School, which member must be present for a re-examination. A student who has failed two preliminary examinations (and hence received two U grades for research credits) may not become a candidate for the doctorate and the student's enrollment in the Graduate School will be terminated.

16.7. Dissertation and Dissertation Instructions for PhD ME

This is the same as for the MS ME (thesis).

16.8. Final Examination for PhD ME

This is the same as for the MS ME (thesis), with one exception. If the student has been pursuing their PhD ME program at the Tri-Cities campus, they must arrange for AMS for their final exam so that people at the Pullman campus have the opportunity to attend as well as people at the Tri-Cities campus. This is a Graduate School requirement since the PhD ME program is Pullman-based.

16.9. Final Examination for PhD ME: Failed

This is the same as for the MS ME (thesis).

16.10. PhD Program (Interdisciplinary Degrees)

Our School participates in the College of Engineering and Architecture's interdisciplinary programs leading to the degrees of MS in Engineering, PhD in Engineering Science, and PhD in Materials Science and Engineering. Although our School participates in these interdisciplinary programs, we do not administer them and a student has to apply to them directly. A student who is in the MS Engineering or PhD Engineering Science program should follow the guidelines of MME. A student who is in the PhD Materials Science and Engineering program should follow the guidelines of that program but, because their advisor is housed in our School, our staff will have important interactions with the student such as: 1) The student will be added to the MME graduate student listsery so they can be kept informed of important department and Graduate School information, 2) the student will be given a mailbox in Sloan 210 which will need to be checked regularly (especially if the student has a Teaching Assistantship through our School), and 3) the student may be assigned a desk in one of our graduate student offices or labs. The student should let the Graduate Academic Coordinator know the date/time of their preliminary exam (if a PhD student) and/or final examination so MME faculty and students can be invited to it.

17. Summary of Programs and Course Requirements

MS in ME: Thesis Option

School of MME

Minimum total credits: 30

In order to satisfy MME requirements, the program must contain:

- a. A minimum of 21 cr hrs of the following graded coursework:
 - 3 cr hrs of any 500-level math or stat course
 - 12 cr hrs of 500-level ME or MSE courses (at least 9 of these must be ME courses)
 - 6 cr hrs of additional courses approved by the student's advisor (300-, 400-, or 500-level only) (a maximum of 6 cr hrs can be at the 300- or 400-level)
- b. A minimum of 2 cr hrs of seminar (ME 598 or MATSE 593)
- c. A minimum of 4 cr hrs of ME 700

All programs must satisfy both MME and Graduate School minimum requirements, including the minimum total credits of 30.

MS in ME: Non-Thesis / Coursework-Only Option

School of MME

Minimum total credits: 33

In order to satisfy MME requirements, the program must contain:

- a. A minimum of 27 cr hrs of the following graded coursework:
 - 3 cr hrs of any 500-level math or stat course
 - 12 cr hrs of 500-level ME or MSE courses (at least 9 of these must be ME courses)
 - 3 cr hrs of additional 500-level courses approved by the student's advisor
 - 9 cr hrs of additional courses approved by the student's advisor (300-, 400-, or 500-level only) (a maximum of 9 cr hrs can be at the 300- or 400-level)
- b. A minimum of 2 cr hrs of seminar (ME 598 or MATSE 593)
- c. A minimum of 4 cr hrs of ME 701

All programs must satisfy both the MME minimum total credits requirement of 33 and the Graduate School minimum total credits requirement of 30.

PhD in ME

School of MME

Minimum total credits: 72

In order to satisfy MME requirements, the program must contain:

- a. A minimum of 24 cr hrs of the following graded coursework (at least 12 cr hrs must be taken at WSU):
 - 3 cr hrs of any 500-level math or stat course
 - 12 cr hrs of 500-level ME or MSE courses
 - 3 cr hrs of additional 500-level courses approved by the student's advisor
 - 6 cr hrs of additional courses approved by the student's advisor (300-, 400-, or 500-level only) (a maximum of 6 cr hrs can be at the 300- or 400-level)
- b. A minimum of 3 cr hrs of seminar (ME 598 or MATSE 593). Seminar credits taken at the Master's level cannot be used towards fulfilling the PhD requirement.
- c. A minimum of 20 cr hrs of ME 800

All programs must satisfy both MME and Graduate School minimum requirements, including the minimum total credits of 72.

Note: ME/MSE 600 is used for internships; ME/MSE 700 is used for MS thesis research; ME/MSE 701 is used for the MS Non-Thesis / Coursework-Only program; ME 800 is used for PhD dissertation research

MS in MSE: Thesis Option

School of MMF

Minimum total credits: 30

In order to satisfy MME requirements, the program must contain:

- a. A minimum of 21 cr hrs of the following graded coursework:
 - 3 cr hrs of any 500-level math or stat course
 - 12 cr hrs of 500-level MSE or ME courses (at least 9 of these must be MSE courses)
 - 6 cr hrs of additional courses approved by the student's advisor (300-, 400-, or 500-level only) (a maximum of 6 cr hrs can be at the 300- or 400-level)
- b. A minimum of 2 cr hrs of seminar (ME 598 or MATSE 593)
- c. A minimum of 4 cr hrs of MSE 700

All programs must satisfy both MME and Graduate School minimum requirements, including the minimum total credits of 30.

MS in MSE: Non-Thesis / Coursework-Only Option

School of MME

Minimum total credits: 33

In order to satisfy MME requirements, the program must contain:

- a. A minimum of 27 cr hrs of the following graded coursework:
 - 3 cr hrs of any 500-level math or stat course
 - 12 cr hrs of 500-level MSE or ME courses (at least 9 of these must be MSE courses)
 - 3 cr hrs of additional 500-level courses approved by the student's advisor
 - 9 cr hrs of additional courses approved by the student's advisor (300-, 400-, or 500-level only) (a maximum of 9 cr hrs can be at the 300- or 400-level)
- b. A minimum of 2 cr hrs of seminar (ME 598 or MATSE 593)
- c. A minimum of 4 cr hrs of MSE 701

All programs must satisfy both the MME minimum total credits requirement of 33 and the Graduate School minimum total credits requirement of 30.

Note: ME/MSE 600 is used for internships; ME/MSE 700 is used for MS thesis research; ME/MSE 701 is used for the MS Non-Thesis / Coursework-Only program; ME 800 is used for PhD dissertation research

18. School of MME Milestones

18.1. MS Program

Thesis Option

Semester	Advisor and research topic. The School of MME requires that a permanent advisor and research topic must be selected before the end of the first semester of graduate study.		
1	 <u>Enrollment</u>. If a student has an assistantship, they must be enrolled full-time (10 to 18 cr hrs). For a summer assistantship, they must enroll for exactly 3 cr hrs. All full-time graduate students must register for at least one research credit each semester so the University can track faculty advisor effort. <u>Seminar</u>. It is recommended (but not required) that students take 1 cr hr of seminar their first semester. 		
Semester 2	rogram of Study Request form. The School of MME requires that the Program of Study Request form be abmitted in the student's second semester of study. eminar. Remember that the program requires a minimum of 2 cr hrs of seminar (ME 598 or MATSE 593).		
Semester 3	Application for degree. A student must apply for degree and graduation in myWSU at least one semester before the final exam is scheduled, see the instructions at https://gradschool.wsu.edu/graduation-application . The student must have an approved Program of Study on file with the Graduate School before the system will allow them to apply for degree and graduation. Writing the thesis. It can and usually does take many months to write a good dissertation or thesis. The student is encouraged to begin writing at least six months (preferably longer) before they intend to take their final exam and is encouraged to show their progress to their advisor and/or research committee to obtain feedback on the format and content. Seminar. Remember that the program requires a minimum of 2 cr hrs of seminar (ME 598 or MATSE 593).		
Semester 4	 Enrollment. The Graduate School requires that a student must have completed or be enrolled in all the required course work and enroll for a minimum of 2 cr hrs of 700 (thesis) or 702 (non-thesis) at the beginning of the semester or summer session in which the final exam is to be taken. If the student has an assistantship, they must be enrolled full-time. Seminar. Remember that the program requires a minimum of 2 cr hrs of seminar (ME 598 or MATSE 593). Thesis and Final Examination: Prerequisite. The Program of Study must be approved, and the Application for Degree must be on file in the Graduate School, before the final exam may be scheduled. Scheduling the exam. The deadline for submission of the Final Exam Scheduling form is on the Graduate School's Deadlines and Procedures for Degree form. The student and their advisor must complete and submit the Graduate Exident Exit Survey form at the same time as the Final Exam Scheduling form. The Chair of the MME GSC will not sign the Scheduling form until the Exit Survey has been received. The completed Final Exam Scheduling form and a copy of the close-to-final draft of the thesis must be submitted to the Graduate School office by the deadline and at least 10 working days prior to the exam date ("working days" do NOT include the weekend or any university holiday) Payment of graduation fee. The graduation fee must be paid to the Controller's office prior to submitting the Application for Degree. At least three weeks before the final exam. First step: A copy of the typed close-to-final draft of the thesis must be submitted to the thesis committee for review and initial confirmation that the thesis is in good shape. Second step: Based on feedback from the committee, the student should finalize the thesis and determine when the committee members are available for the final exam. T		

- The student must submit an electronic copy of their final thesis to the Graduate School, following the instructions on the Graduate School's *Deadlines and Procedures for Degree* form. The Graduate School will check it for compliance and format, and will inform the student if corrections are needed.
- At least 5 working days before the final exam:
 - If requested, a copy of the final thesis must be provided by the student for public inspection.
 - Copies of the thesis/project report must be furnished to all members of the candidate's committee at least five working days (one week) before the final exam; if this is not done then the committee reserves the right to cancel the exam.
- The final exam:
 - As indicated in the GS PPM, the thesis exam is normally limited to two hours and should not exceed two and one-half hours.
- Within five working days after the final exam:
 - <u>Graduate School copies</u>. The final thesis must be uploaded to the library following the instructions on the Graduate School's *Deadlines and Procedures for Degree* form. The student must also deliver a hard copy of the title page, signature page (signed in black ink), and abstract, which have all been printed on 100% cotton paper, and the signed/witnessed Release/Hold Harmless Agreement to the Graduate School office in French Ad room 324. The Graduate Academic Coordinator has 100% cotton paper that the student can use for printing the title page, signature page, and abstract.
 - The advisor's copy. The student only needs to provide a hard copy to their advisor if the advisor requests it.
 - The student's copy. If the student would like to have a personal copy of their thesis bound, they must take it to the Bookie (or other binding business) to have it done. If their advisor is willing to pay to have a copy bound for them, the advisor must contact the staff in the main office to determine how to go about this.
 - <u>Hold Harmless/Copyright Acknowledgement form.</u> All students must submit this form, https://gradschool.wsu.edu/facultystaff-resources/18-2.
- <u>Before leaving</u>: If the student is not continuing on for another degree in MME, they must complete the Checkout Sheet form (with appropriate signatures) and turn it in to the Graduate Academic Coordinator before leaving. The GAC can provide this form to the student.

Non-Thesis / Coursework-Only program—Major milestones of this option are similar to those listed above.

The Graduate School's *Deadlines and Procedures for Degree* can be found at https://gradschool.wsu.edu/facultystaff-resources/18-2.

School of MME Milestones

18.2. PhD Program

Semester 1	 Advisor and research topic. The School of MME requires that a permanent advisor and research topic must be selected before the end of the first semester of graduate study. Enrollment. If a student has an assistantship, they must be enrolled full-time (10 to 18 cr hrs). For a summer assistantship, they must enroll for exactly 3 cr hrs. All full-time graduate students must register for at least one research credit each semester so the University can track faculty advisor effort. Seminar. It is recommended (but not required) that students take 1 cr hr of seminar their first semester. Program of Study Request form The School of MME requires that the Program of Study Request form be.
2	 Program of Study Request form. The School of MME requires that the Program of Study Request form be submitted in the student's second semester of study. Seminar. Remember that the program requires a minimum of 3 cr hrs of seminar (ME 598 or MATSE 593).
Semester 3	• <u>Seminar</u> . Remember that the program requires a minimum of 3 cr hrs of seminar (ME 598 or MATSE 593).
6 or 7	 Seminar. Remember that the program requires a minimum of 3 cr hrs of seminar (ME 598 or MATSE 593). Preliminary examination. Please see the <i>Preliminary Examination</i> section of this handbook for details. 1. Prerequisite. An approved Program of Study must be on file at the Graduate School before the prelim exam can be scheduled; the student must be registered for a minimum of 2 cr hrs of 800 as a regular graduate student at the beginning of the semester or summer session in which the preliminary exam is to be taken. 2. Scheduling. The prelim exam may be scheduled only after program requirements have been satisfied, after the Program of Study has been approved, after a substantial portion of the required coursework has been completed, and when the student or committee chair believe the student is prepared for the exam. A minimum of four months must elapse between the successful completion of a prelim exam and the scheduling of a final exam (because of the four months policy, the prelim exam cannot be taken in the same semester that the final exam is taken). 3. At least 10 working days before the Prelim Exam (for the PhD in ME). A copy of the typed final research proposal must be given to each committee member at the time they are asked to sign the scheduling form. 4. At least 10 working days before the Prelim Exam. The completed, signed Preliminary Exam Scheduling form must be submitted to the Graduate Academic Coordinator for review by the Chair of the MME GSC and subsequent forwarding to the Graduate School.
Semester 7	 Seminar. Remember that the program requires a minimum of 3 cr hrs of seminar (ME 598 or MATSE 593). Application for degree. A student must apply for degree and graduation in myWSU at least one semester before the final exam is scheduled, see the instructions at https://gradschool.wsu.edu/graduation-application. Writing the dissertation. It can and usually does take many months to write a good dissertation. The student is encouraged to begin writing at least six months (preferably longer) before they intend to take their final exam and is encouraged to show their progress to their advisor and/or research committee to obtain feedback on the format and content.
Semester 8	 Enrollment. The Graduate School requires that a student must enroll for a minimum of 2 cr hrs of 800 at the beginning of the semester or summer session in which the final exam is to be taken. If a student has an assistantship, they must be enrolled full-time (10 to 18 cr hrs). Seminar. Remember that the program requires a minimum of 3 cr hrs of seminar (ME 598 or MATSE 593). Dissertation and Final Examination: Prerequisite. The Program of Study must be approved, and the Application for Degree must be on file in the Graduate School before the final exam may be scheduled. Scheduling the exam. The deadline for submission of the Final Exam Scheduling form is on the Graduate School's Deadlines and Procedures for Degree form. The student and their advisor must submit the Graduate Student Exit Survey form at the same time as the Final Exam Scheduling form. The Chair of the MME GSC will not sign the Scheduling form until the Exit Survey has been received. The completed Final Exam Scheduling form and a copy of the close-to-final draft of the dissertation must be submitted to the Graduate School office by the deadline and at least 10 working days prior to the exam date ("working days" do not include the weekend or any university holiday). Payment of graduation fee and microfilming fee. The graduation fee and microfilming fee must be paid to the Controller's office by the time the final exam is scheduled. Please keep the receipt as proof of payment.

4. At least one month before the final exam:

- <u>First step</u>: A copy of the typed close-to-final draft of the dissertation must be submitted to the student's committee for review and initial confirmation that the dissertation is in good shape.
- <u>Second step</u>: Based on feedback from the committee, the student should finalize the dissertation and determine when the committee members are available for the final exam.
- Third step: The student should reserve a room for the final exam (see the *Final Examination* section of this handbook for guidance). Once that is done, the student and their advisor should complete the Exit Survey form, and the student should prepare the Final Exam Scheduling form and have the committee members sign it. As indicated in the *GS PPM*, by signing the scheduling form the committee members are indicating that a typed dissertation, suitable in format for submission to the Library, has been given their approval and that they are accepting the date, time, and place of the final exam.
- 5. At least 10 working days before the final exam ("working" does not include weekends or holidays):
 - The Exit Survey and Final Exam Scheduling form must be submitted to the Graduate Academic Coordinator for review by the Chair of the MME GSC and subsequent forwarding to the Graduate School.
 - The student must submit an electronic copy of their final dissertation to the Graduate School, following the instructions on the Graduate School's *Deadlines and Procedures for Degree* form. The Graduate School will check it for compliance and format, and will inform the student if corrections are needed.
- 6. At least 5 working days before the final exam:
 - If requested, a copy of the final thesis must be provided by the student for public inspection.
 - Copies of the dissertation must be furnished to all members of the candidate's committee at least five
 working days (one week) before the final exam; if this is not done then the committee reserves the right
 to cancel the exam.

7. The final exam:

• As indicated in the GS PPM, the dissertation exam is normally limited to two hours and should not exceed two and one-half hours.

8. Within five working days after the final exam:

- Graduate School copies. The final dissertation must be uploaded to the library following the instructions on the Graduate School's *Deadlines and Procedures for Degree* form. The student must also deliver a hard copy of the title page, signature page (signed in black ink), and abstract, which have all been printed on 100% cotton paper, and the signed/witnessed Release/Hold Harmless Agreement to the Graduate School office in French Ad room 324. The Graduate Academic Coordinator has 100% cotton paper that the student can use for printing the title page, signature page, and abstract.
- Advisor's copy. The student only needs to provide a hard copy to their advisor if the advisor requests it.
- The student's copy. If the student would like to have a personal copy of their dissertation bound, they must take it to the Bookie (or other binding business) to have it done. If their advisor is willing to pay to have a copy bound for them, the advisor must contact the staff in the main office to determine how to go about this.
- <u>Hold Harmless/Copyright Acknowledgement form.</u> All students must submit this form, https://gradschool.wsu.edu/facultystaff-resources/18-2/.
- NSF Survey of Earned Doctorates and Graduate School Exit Questionnaires. Upon submitting the final dissertation, doctoral students are asked to complete the Survey of Earned Doctorates from the National Science Foundation, https://gradschool.wsu.edu/facultystaff-resources/18-2/. The Graduate School also has exit questionnaires for all students completing a graduate program,
- 9. <u>Commencement ceremony</u>: The Graduate School requires that a doctoral candidate wishing to participate in the commencement ceremony must complete and be cleared of all program requirements by the Wednesday preceding the commencement ceremony.
- 10. <u>Before leaving</u>: The student must complete the Checkout Sheet form (with appropriate signatures) and turn it in to the Graduate Academic Coordinator before leaving. The GAC can provide this form to the student.

The Graduate School's *Deadlines and Procedures for Degree* can be found at https://gradschool.wsu.edu/facultystaff-resources/18-2.

19. GRADUATE ASSISTANT GUIDELINES

19.1. Definitions

<u>Assistantships</u>. Assistantship awards offer a stipend to the student in return for certain specified services to the School of MME. The stipend is treated as income (subject to withholding taxes).

<u>Research Assistant</u>. Research assistantships are similar to teaching assistantships except that recipients are given basic research assignments. The precise nature of the duties will vary depending on the nature of the discipline, the particular projects under way in the School, and the interests and skills of the students. Research assistantships are typically funded through external research grants or contracts obtained by members of the faculty.

<u>Teaching Assistant</u>. Teaching assistantships involve payment for services related to instruction. Typical duties include such things as grading homework and exams, monitoring and/or teaching laboratories, and holding office hours. Teaching assistantships are funded by the state of Washington.

19.2. Assistantship Requirements

19.2.1. Eligibility for appointment

The following will be considered in selecting those for Research Assistant (RA) or Teaching Assistant (TA) appointment: GPA, area of interest, engineering experience, TOEFL scores (international students), GRE scores, and quality of previous academic work. Decisions on support of students from specific funded research projects are the responsibility of the faculty member who is the Principal Investigator of the project. The university requires that for a student to be eligible to hold a graduate assistant appointment, all of the following must be met:

- The student must be admitted to a graduate degree program.
- The student must be eligible to work with appropriate visa status and work permits.
- International students whose native language is not English and who have not previously held a teaching assistantship at WSU are required to take an English Proficiency Examination (called an ITA exam) before their initial TA appointment begins.
- All students on a TA appointment are required to take FERPA training. FERPA stands for Family Educational Rights and Privacy Act.
- Mandatory training on the Responsible Conduct of Research is required of all graduate students, and it is an
 employment requirement for graduate assistants. Students are not eligible for an assistantship until the
 training is complete.

19.2.2. Eligibility for appointment—additional criteria for Teaching Assistants

Potential TAs must meet the criteria listed below before they will be considered for a TA position. If the student does not meet one or more of the criteria, they will not be considered:

- 1. The student must have a CGPA of 3.5 or higher.
- 2. The student must have a Bachelor's degree in engineering (only the Bachelor's degree is being considered; Master's degrees are not being considered).
- 3. An international student must have an ITA score of at least 2.

19.2.3. Maintaining an assistantship

As described in the GS PPM, assistantships are granted on a semester basis, unless specifically stated otherwise in a written letter of offer, and are renewed each semester at the discretion of the department and the Graduate School. The Graduate School recommends that departments provide graduate assistants a written reminder thirty days prior to the end of the current semester if an assistantship will not be renewed for the following semester; however, such notice is not required. The department may terminate an assistantship mid-semester for reasons such as continual deficient performance or misconduct while performing the duties of the assistantship.

The School of MME requires that for a student to be eligible to maintain a graduate assistant appointment, all of the following criteria must be met. Failure to meet one or more may result in termination of the assistantship or a reduction in pay.

- The student must have taken all of the relevant mandatory training mentioned in the previous section.
- The student must be available for work on the first working day and through the last working day of their appointment period. During the term of the appointment, all graduate students on assistantship are expected to be at work each normal workday, including periods when the university is not in session, with the exception of the legal holidays designated by the Board of Regents. A student on assistantship does not earn annual leave or sick leave.
- The student must be enrolled fulltime during the term of their appointment (10 to 18 credit hours during the academic semester, or 3 credit hours during summer session).
- The student must maintain a minimum cumulative GPA of 3.0 on their transcript <u>and</u> a minimum cumulative GPA of 3.0 for the courses listed on their Program of Study.
- The student must perform assigned RA and/or TA duties and functions in a timely and competent fashion. Continual deficient performance or misconduct while performing the duties of the assistantship may result in immediate termination of the assistantship.
- If a TA or Teaching Fellow receives an evaluation of marginal performance, they will be given a first warning. If the student receives a second evaluation of marginal performance, all future TA offers will be immediately withdrawn.
- The student must demonstrate satisfactory progress in their specified program. Unsatisfactory progress may be defined as the failure to maintain a 3.0 GPA, being placed on academic probation, failure to file the Program of Study in a timely manner, failure of the preliminary or final examination, an unsatisfactory evaluation of a thesis or dissertation, or any other failure of a required component of one's Program of Study.
- The student must comply with our School's and the University's expected standards of conduct for students. Failure to do so may result in immediate termination of the assistantship.
- Because current WSU enrollment is a condition of holding an assistantship, assistantships will terminate immediately upon withdrawal or disenrollment from WSU, or a final order of suspension or expulsion as a result of a violation of the Standards of Conduct for Students.

19.2.4. TA who cannot start their position on time

As stated before, the student must be available for work on the first working day and through the last working day of their appointment period. The department policy is that if a student is not here and available to start work by the time their appointment begins, they must get the written approval of the instructor and the Chair of the MME GSC in order to keep their TA. If they cannot arrive and begin work until after the first day of class, then the MME GSC will decide what course of action should be taken which may include withdrawing the TA offer.

19.3. <u>Duration of Appointment</u>

Assistant appointments are for the period August 16 to December 31 (fall semester) or January 1 to May 15 (spring semester). Appointments are made on a semester by semester basis during the academic year. If the coursework, research progress, and assigned responsibilities have been performed satisfactorily, students may normally expect renewal of an assistantship during the academic year until their degree program is completed. The degree program is defined as no more than two years for the MS, and no more than four years after the MS degree is obtained for the PhD. Continuation of financial support beyond the normal time period for the degree program is discouraged and can only be given with special permission of the MME GSC and the School Director.

While renewal of an assistantship is common, it cannot be guaranteed as continuation of any support is subject to availability of funds. The School of MME reserves the right to terminate an appointment because of unavailability of funds or other conditions beyond its control.

19.4. <u>Duties and Responsibilities</u>: General

The School of MME and the student understand and agree that the stipend portion of an assistantship is not a scholarship award; rather, it is an appointment which involves the performance of services in return for reasonable compensation in the form of a stipend. A half-time appointment requires a minimum of 20 hours of work per week.

During the term of the appointment, all graduate students on assistantship are expected to be at work each normal workday, including periods when the university is not in session, with the exception of the legal holidays designated by the Board of Regents. A student on assistantship does not earn annual leave or sick leave.

Graduate assistants are assigned to work under the supervision of a faculty member. Any task necessary to the teaching or research functions of the School, and which the student is competent to perform, may be assigned. If a graduate assistant feels a task is unreasonable, they should discuss the matter with their supervisor. If a resolution cannot be reached, they should discuss the matter with the Chair of the MME GSC. If a resolution still cannot be reached or the Chair is not available, the School Director should be contacted.

It should be noted that just because a student has a Research Assistant position for which he or she gets paid for 20 hours a week, the main purpose of the RA is to waive the student's tuition and to pay them a stipend to help with expenses. In reality, a student will need to perform research for as many hours as are necessary to get the research results needed so the student can graduate in a timely manner, and in almost all cases this will be well above 20 hours a week.

19.5. Duties and Responsibilities: Teaching Assistant

The contributions of a TA are extremely important in support of our undergraduate program. A good TA can make a significant difference in the quality of a class and on the success of the students in that class. Any questions regarding what should or should not be done should be directed to the instructor or to the Chair of the MME GSC.

The position of TA entails certain responsibilities different from those of an RA. These include:

- Availability during the appointment period. It is very important that a TA contact the instructor and be available for work on the first working day of their appointment. Although classes may not start until a week or two after the appointment period begins, the instructor will often times need help with class preparation. During the term of the appointment, the TA is expected to be at work each normal workday, including periods when the university is not in session, with the exception of the legal holidays designated by the Board of Regents. A student on assistantship does not earn annual leave or sick leave.
- <u>Class attendance</u>. The TA is expected to show up for class prepared and on time. Continual tardiness and lack of preparedness may result in disciplinary action.
- Question about TA assignment. Our department tries to make the best fit possible between the TA and the class that they have been assigned to. On occasion, the TA may feel that their background may not be well suited to the particular class that they have been assigned to, which may limit their effectiveness as a TA. It is the student's responsibility to notify their advisor and/or the instructor of the course of their concern in their TA assignment. Ideally this should be done as soon as the assignment is made, or no later than the first week of class. Failure to express this concern may result in poor performance which can jeopardize future TA support for the student.
- <u>Communication with the instructor</u>. An instructor is often very busy not only with their teaching duties but with research, and they do not have time to track down their TA to assign work duties. Thus, it is the responsibility of the TA to make sure they keep in continuous communication with the instructor for work assignments and expectations. Effective communication will prevent the TA from receiving a poor rating on the TA Evaluation form.
- <u>Interaction with students</u>. A TA must adhere to the same restrictions as the instructor in their interaction with the students. See the *Required Reading* section that follows.
 - o If the TA is having difficulty with a student, the matter should be discussed with the instructor immediately. The TA can also discuss the matter with the Chair of the MME GSC.
 - o Graduate TA's could be the subject of a grievance filed by a student. If the TA is aware of a student grievance, they should consult with the instructor immediately. A grievance must be handled officially and with final resolution.
- <u>Mailboxes</u>. Papers or communication from the instructor will often be put in the TA's mailbox (located in Sloan 210). Mailboxes should be checked every day. This is especially important for TA's assigned to instructors in the branch campuses.

- Office hours. Often times an instructor will request that the TA post and keep office hours. Again, if this is an assigned duty, it is important that it be done. The students should be given the TA's email address, office location, office phone number (if there is one), when they will hold office hours, and the office hours should be posted on the office door.
- <u>Posting of grades and a student's right to privacy</u>. If the TA is asked by the instructor to post grades, they must adhere to the University's policy on the posting of student grades (which follow FERPA guidelines):

Student grades (including final grades, mid-term grades and class assignment grades) may be posted, both on printed lists as well as on class websites, provided that the posting method maintains a high standard for data security and that student confidentiality is protected. Posting grades by name, student ID number or Social Security Number is not permitted under any circumstances. The best way to post grades is using an approved online learning environment where students must login using credentials that only the student knows and in which the student can only see their own record. Another method that protects student confidentiality is to assign randomly generated numbers to students in a class which only the student knows and then post grades along with these assigned numbers in numerical, not alphabetic, order. Classes with 10 or fewer students should not have grades posted in this manner, as protecting the identity of student records in small groups is difficult. https://www.ronet.wsu.edu/main/apps/GradePolicy.ASP.

All instructors and Teaching Assistants need to remember:

- Do not put graded papers or exams in a pile so that all the class can access them.
- Nothing should be done that would allow a student to see another student's complete WSU identification number, or that may otherwise jeopardize a student's right to privacy.
- Required reading. All students with a teaching assistantship are required to read:
 - Family Educational Rights and Privacy Act of 1974 (FERPA). FERPA is a federal law protecting the privacy of students' educational records, https://www.ronet.wsu.edu/main/apps/ferpatest.asp.
 - Policy Prohibiting Discrimination, Sexual Harassment, and Sexual Misconduct. This policy expresses the commitment of WSU to maintaining an environment free from discrimination, including sexual harassment, http://public.wsu.edu/~forms/PDF/EPM/EP15.pdf.
 - Standards of Conduct for Students, The Conduct Policies can be found at https://conduct.wsu.edu/policies and include Standards of Conduct for Students, Alcohol and Drug Policy, Good Samaritan Guideline, Downloading or Sharing Files/Software, and Group Accountability Statement.

19.6. International Students: English Proficiency Examination for TA's

As stated in the *GS PPM*, international graduate students whose native language is not English and who have not previously held a teaching assistantship at WSU are required to take an English Proficiency Examination (also called the ITA Evaluation) before being granted a teaching assistantship. The exam is administered by the Intensive American Language Center (IALC), and must be taken prior to the first semester on appointment. This evaluation is required regardless of the work assignment. The purpose is to ensure that undergraduate students can understand all assistants with whom they have contact (classroom or otherwise). Please note that a faculty representative from the student's department serves on the testing committee. In our School, the faculty representative is the student's advisor. Failure to take this exam in a timely manner or failure to show up for a scheduled exam can result in termination of the teaching assistantship. See https://ip.wsu.edu/learn-english/teaching-assistant-evaluations.

19.7. Leave Policy

The University requires that the employee must be available for work on the first day of the appointment period through the last day of the appointment period. If the first day is a weekend or holiday, then the first day would be the next working day. If a student is not here and available for work on the first day of the appointment period, their appointment start date will be changed to begin on the day that they are here and available to work, since it is against the law to pay an employee when they are not here and available to work. Students on assistantship do not earn annual leave (vacation) or sick leave. All employees, including those on TA and RA, must be at work each workday during the period of appointment, including periods when the University is not in session (e.g., all employees must

work during Thanksgiving Break, Winter Break, and Spring Break), with the exception of legal holidays and university closure days. If a student desires to leave for any period of time, they must check with their advisor first (and the instructor if they have a TA position) to make sure that he or she is okay with their leaving. It is highly recommended that the student do this by email so that there is a written record for both the student and their advisor as to what was agreed upon.

19.7.1. Official Leaves of Absence

Please see the previous section in this handbook that discusses official leaves of absence.

In the event of an emergency, such as a death in the family, the student should let one or more of the following know of their situation and when they estimate they might return: their advisor, the Chair of the MME GSC, the Graduate Academic Coordinator, the School Director, or the staff in the main office. If the student asks us to, we can contact their class instructors to apprise them of the situation.

19.7.2. Internships

Please see the previous section in this handbook that discusses Internship leave.

19.7.3. Serious Health Problems or Personal Circumstances

The School hopes that a graduate student's life will be a happy and rewarding one at all times. However, all students will face different types of pressures and will interact with different groups of peers and professors. If the student finds that a conflict arises that adversely affects their research program or their daily life, our School wishes to do everything possible to help the student resolve it. The student may find that talking with the people involved suffices to remedy the situation. They are encouraged to talk over problems with their advisor or committee members. Although the main role of the advisory committee is to monitor the student's progression through the graduate program and to help define the goals and expectations for the thesis or dissertation research, the committee is also in place to help the student with all aspects of their life as a graduate student. The student is also welcome to discuss the conflict with the Chair of the MME GSC or the School Director. Such discussions will be considered confidential. If appropriate, the student will be directed to a University office that may be able to provide them with appropriate advice to address their concerns.

19.7.4. Travel: Conferences, Seminars, etc.

All students are encouraged to attend conferences, seminars, etc. that will contribute to their research, professional education, etc. MME policy requires that any MME student enrolled during the time of his/her travel must complete a Travel Request form (whether they intend to claim expenses or not). This form can be obtained from staff in the MME main office. From this, a Travel Authority form will be generated. After conclusion of the travel, the student should give his/her claimed expense receipts (if any) to the staff in the MME main office. A Travel Expense Voucher will then be generated. Expenses claimed without a receipt may not be reimbursable. While on travel, the student is a representative of MME and WSU, and it is expected they will conduct themselves in a professional manner consistent with School and University policies.

19.7.5. Travel: International Travel Registry

WSU requires graduate students to register with the International Travel Registry for all university sponsored, affiliated, or promoted international travel that is not-for-credit, whether traveling individually or in a group. They can register at https://ip.wsu.edu/scholars-abroad/international-travel-registry.

19.7.6. Vacation and Personal Leave Requests

A student on a TA or RA does not earn annual leave (vacation) or sick leave. If they desire to leave for any period of time, they must check with their advisor first (and the instructor if they have a TA position) to make sure that he or she is okay with their leaving. It is highly recommended that the student do this by email so that there is a written record for both the student and their advisor as to what was agreed upon. The granting of the leave request will take into account the progress of the student towards his/her degree objective.

19.8. MME Outstanding Teaching Assistant Award

Nominations for this award are made by the instructor during the TA Evaluation process (the student cannot nominate himself/herself). The nomination is based on the instructor's evaluation of their TA, not on any evaluation of the TA by the students in the class, although the instructor may choose to include student comments in their

nomination letter. The recipient of this award is determined every spring semester by the MME GSC, and is based on nominations from the previous spring and fall semesters. The recipient's name is listed in a special case in the hallway down from the MME main office. As part of this award, the School is usually able to provide the student with money to be applied towards travel to a conference or academic meeting during the coming academic year.

19.9. MME Outstanding Researcher Award

Nominations for this award are made by the advisor during the Annual Review process (the student cannot nominate himself/herself). The recipients of this award are determined every spring semester by the MME GSC. Usually an award is given to one student in the MS program (MS MSE or MS ME) and one student in the PhD ME program. As part of this award, the School is usually able to provide the student with money to be applied towards travel to a conference or academic meeting during the coming academic year.

19.10. Professional Conduct

Graduate assistants are expected to support and maintain an academic environment conducive to the positive educational development of all students and faculty members. This standard of professional conduct requires each member to function in a manner that is free of intimidation and harassment based on sex, race, religion, politics or professional interest. Special care must be taken to avoid exploitation of students or colleagues for private or professional advantage, especially those subject to one's authority.

All graduate assistants should familiarize themselves with the *Graduate Student Rights and Responsibilities*, https://gradschool.wsu.edu/documents/2015/01/gsrightsresponsibilities.pdf. It provides a code of ethics to be used as guidelines for faculty and graduate student interaction. It serves as written guidance, focusing upon graduate student rights and responsibilities, and on avenues for adjudication of these rights and responsibilities.

19.11. Residency Requirements

Residency policies are set by Washington State (RCW 28B.15) and applied uniformly throughout Washington's public colleges and universities. Non-resident domestic graduate students holding either state funded (TA) or non-state funded (RA) graduate service appointments on a quarter-time or greater basis may be awarded a waiver of the non-resident differential. However, non-resident waivers cannot be guaranteed beyond one year. Because of this one year limitation, it is imperative that as soon as a domestic student is given an assistantship, they start working on establishing Washington State residency. *If a student has not established residency by the one year limit they will personally be required to pay the out of state portion of the tuition* (http://residency.wsu.edu/residency-requirements). International students are not bound by the one year limitation except that they have to reside in Washington State throughout their assistantship appointment period.

19.12. Teaching Assistant Evaluations

Students on TA support are evaluated at the end of each semester with regard to their performance pertaining to their assigned TA duties. This is done under the direction of the MME GSC with input from the instructor. The School Director then gives written notification to the TA of their performance with suggestions for improvement if needed. If a student receives an evaluation of marginal performance, they will be given a first warning. If the student receives a second evaluation of marginal performance, all future TA offers will be immediately withdrawn.

19.13. Teaching Fellows Program

The Teaching Fellows Program was established to give PhD students interested in becoming college faculty after they graduate a mentored experience in undergraduate teaching. A student on the Fellows program would be paid as a regular Teaching Assistant with an additional small stipend to reflect the extra responsibility of the position. The Fellows are chosen by the School Director in conjunction with the Chair of the MME GSC. If a student is interested in becoming a Fellow, they should contact the School Director. A Fellow will:

- Prepare for the course like a regular instructor.
- Be mentored by a senior faculty member, who may or may not be their research advisor.
- Receive his or her own teaching evaluations from the students at the end of the semester.

Of special importance:

• A Teaching Fellow must follow the same university/department requirements for instructing a class as a regular instructor. For example, the university has strict guidelines about class scheduling. A course must be taught within the time period scheduled for that course, and can't randomly be started earlier or

- consistently run late due to other commitments for the assigned room and other commitments that the students may have before or after the class period.
- If a Teaching Fellow has consistently failed to perform one or more of the required duties of an instructor and/or has received a second warning of marginal performance, all future TA/TF offers will be immediately withdrawn.

19.14. Termination of Appointment or Reduction in Pay

The MME GSC, after consultation with the student's advisor, other faculty (if needed), and the School Director, may elect to reduce the pay or terminate an assistantship in the event that one or more of the following occur:

- Failure to take and/or pass the English Proficiency Examination by the deadline (required for international students whose native language is not English and who have not previously held a teaching assistantship at WSU).
- The student is not available for work during part or all of the appointment period and has not complied with the School's policy on requesting leave.
- If the student is an RA, they have consistently failed to perform assigned duties and functions in a timely and competent fashion.
- If the student is a TA, they have consistently failed to keep in communication with the instructor and/or have consistently failed to perform one or more of the required duties and/or have received a second warning of marginal performance.
- If the student is a Teaching Fellow, they have consistently failed to perform one or more of the required duties of an instructor and/or have received a second warning of marginal performance.
- The student has failed to maintain the required fulltime course load throughout their appointment period.
- The student's GPA has fallen below the required 3.0 and reinstatement has become necessary, or the student has been put on probation or dismissed.
- The student has failed to file a Program of Study by the required date.
- The student has not demonstrated satisfactory progress in their specified program.
- The student has not complied with the School of MME's expected standards of conduct for our students and WSU's Standards of Conduct for Students.
- The student has failed to keep in regular contact with their advisor about their research progress & status.
- Other situations that merit a review of the assistantship offer.

19.15. Working Additional Hours Beyond the .50% Appointment

As stated in the GS PPM, the Graduate School strongly discourages graduate assistants from working additional hours (at paid employment) beyond their .50% FTE because the additional work often has a negative impact on the student's academic progress and time toward completing a degree. At the same time, the Graduate School realizes that work opportunities often can provide students with professional development, support their specific career goals, and/or provide additional financial resources. Consequently, the Graduate School recommends the following guidelines for programs that have graduate assistants who want to work additional hours beyond the .50% FTE appointment:

- The additional work should add to the student's professional development or support specific career goals.
- More than 5 hours per week is strongly discouraged.
- In cases of more than 5 additional hours per week, the graduate program director should review and approve the additional work in writing and routinely screen the student to ensure that he/she is making good progress in the program. The following should be considered in the view process: 1) the student's current status in the department (performance and longevity), 2) the student's timeline for degree completion, and 3) how the work involved contributes to the student's academic work and progress. The program director should ensure, in a written memo to the Dean of the Graduate School, that if the student does not complete the degree requirements in a timely manner that the department will continue to fund them until they do.

In addition, please note:

- International students are limited to working no more than 20 hours/week when school is in session, but are permitted to work up to 40 hours/week during annual vacation periods, see https://ip.wsu.edu/on-campus/employment-eligibility.
- Under the State of Washington regulations, all enrolled students (both domestic and international) are limited to 516 hours of on-campus employment in 6 consecutive months (average of 20 hours/week) excluding vacation periods and those students working in their major field of study. If an enrolled student works more than 20 hours/week during summer break, the student may later be required to stop working or cut back to remain within the 516-hour limit. See https://ip.wsu.edu/on-campus/employment-eligibility.

20. ACADEMIC ASSESSMENT AND OUTCOMES INFORMATION

20.1. NWCCU

The Northwest Commission on Colleges and Universities (NWCCU) is an independent, non-profit membership organization recognized by the U.S. Department of Education as the regional authority on educational quality and institutional effectiveness of higher education institutions in the seven-state Northwest region of Alaska, Idaho, Montana, Nevada, Oregon, Utah, and Washington. Its mission is to assure educational quality, enhance institutional effectiveness, and foster continuous improvement of colleges and universities in the Northwest region through analytical institutional self-assessment and critical peer review based upon evaluation criteria that are objectively and equitably applied to institutions with diverse missions, characteristics, and cultures. Through its regional accreditation, it recognizes higher education institutions for performance, integrity, and quality to merit the confidence of the educational community and the public. WSU has been continuously accredited by NWCCU or its predecessor organization since 1918. See http://www.nwccu.org/index.htm for more information.

20.2. School of MME Outcomes Assessment Plan

Section 2.C.2 of the NWCCU Standard states, "The institution identifies and publishes expected course, program, and degree learning outcomes. Expected student learning outcomes for courses, wherever offered and however delivered, are provided in written form to enrolled students." Listed below is relevant information taken from the School of MME Outcomes Assessment Plan for MS/PhD ME Programs (updated May 2018).

Program title: Mechanical Engineering

Scope of Assessment: MS & PhD

Program title: Materials Science & Engineering

Scope of Assessment: MS

1. HISTORICAL OVERVIEW

Two years after Washington State Agricultural College and School of Science was chartered in 1890 as a land grant institution, the Mechanical Engineering course of study was offered (1892/93). In 1893, the Department of Mechanical Engineering was established. The first BS in Mechanical Engineering was awarded in 1898, with the first women receiving the degree in 1899. The MS in ME degree program was first offered in 1922. The PhD in ME program was first offered in 1985.

In 1906, the Department of Mechanical Engineering changed its name to the Department of Mechanical and Electrical Engineering, and later changed its name back to the Department of Mechanical Engineering. In 1917, the College of Mechanic Arts and Engineering was formed, which later changed its name to the College of Engineering and Architecture.

Mechanical Engineering was first accredited in 1936. The Department of Materials Science and Engineering was established in 1973 with the BS and MS in Materials Science and Engineering first being offered in 1979. In 1986, the Department of Mechanical Engineering and the Department of Materials Science and Engineering merged into the Department of Mechanical and Materials Engineering. In 1995, the name was changed to the School of Mechanical and Materials Engineering (MME).

2. PROGRAM MISSION

The mission of the School of Mechanical and Materials Engineering is to educate engineering students to be successful, world-class professionals capable of dynamic contributions in contemporary engineering practice and research and development.

2.1 Program Goals

- 1. Develop world-class research in areas addressing critical scientific and technological needs.
- 2. Prepare graduates for career and leadership positions in academia, industry and national laboratories.
- 3. Produce graduates who possess sound scientific and engineering knowledge.

3. OUTCOMES AND ASSESSMENT METHODS

3.1 Student Learning Outcomes

To achieve the program goals outlined in Section 2.1, the program aims to provide a variety of experiences that help students to:

- (a) Excellence. Achieve the highest level of expertise, mastery of the knowledge in their fields, and the ability to apply associated technologies to novel and emerging problems. In addition, Ph.D. candidates are expected to make original contribution to their field.
- (b) <u>Breadth</u>. Broaden professional foundations through activities such as teaching, internships, fellowships, and grant applications.
- (c) <u>Problem definition</u>. State a research problem in such a way that it clearly fits within the context of the literature in an area of study, and demonstrate the value of the solution to the research problem in advancing knowledge within that area.
- (d) <u>Problem solving</u>. Apply sound research methods/tools to problems in an area of study, and describe the methods/tools effectively. Analyze/interpret research data.
- (e) <u>Professionalism</u>. Participate in professional organizations, becoming members and attending meetings. Present research to local, regional, national, and international audiences through publications in professional journals and conference papers.
- (f) <u>Communication</u>. Communicate research clearly and professionally in both written and oral forms appropriate to the field.

3.2 Methods of Assessment

The table below explains the methods of assessment. In particular, what data correlates with a particular outcome, and how and when are data collected.

	Outcome	Data	Source	Collected
(a)	Excellence. Achieve the highest level of expertise, mastery of the knowledge in their fields, and the ability to apply associated technologies to novel and emerging problems. In addition, Ph.D. candidates are expected to make original contribution to their field.	Rubric to be filled out at student's preliminary exam (if in PhD ME program), and final exam	Faculty on student's committee	At each final defense, and prelim exam if applicable
(b)	<u>Breadth.</u> Broaden professional foundations through activities such as teaching, internships, fellowships, and grant applications.	Student's Graduate Student Exit Survey	Students	At each final defense
(c)	Problem definition. State a research problem in such a way that it clearly fits within the context of the literature in an area of study, and demonstrate the value of the solution to the research problem in advancing knowledge within that area.	Rubric to be filled out at student's preliminary exam (if in PhD ME program), and final exam	Faculty on student's committee	At each final defense, and prelim exam if applicable
(d)	Problem solving. Apply sound research methods/tools to problems in an area of study, and describe the methods/tools effectively. Analyze/interpret research data.	Rubric to be filled out at student's preliminary exam (if in PhD ME program), and final exam	Faculty on student's committee	At each final defense, and prelim exam if applicable
(e)	Professionalism. Participate in professional organizations, becoming members and attending meetings. Present research to local, regional, national, and international audiences through publications in professional journals and conference papers.	1) Student's Graduate Student Exit Survey, and 2) advisor's ranking of student in the last Annual Review conducted before the student's final defense.	1) Students, and 2) student's advisor.	1) At each final defense, and 2) the last Annual Review conducted of the student

(f)	Communication. Communicate research clearly and	Rubric to be filled out at	Faculty on	At each final
	professionally in both written and oral forms	student's preliminary exam (if in	student's	defense, and
	appropriate to the field.	PhD ME program), and final	committee	prelim exam if
		exam		applicable

4. USE OF ASSESSMENT DATA

4.1 Assessment

The assessment data is to be collected by the graduate studies coordinator according to the schedule set forth in section 3.2. The Graduate Studies Committee chair will summarize the assessment data annually.

4.2 Program

The assessment report will be presented to the faculty at the annual retreat (typically in August). Action items to improve the graduate program from faculty feedback of the report will be addressed by the Graduate Studies Committee during the year following the retreat.