Comprehensive Examination Requirements

MSME students must complete satisfactorily a comprehensive examination. Students failing this examination may try a second time not sooner than 12 weeks after the first attempt. Students failing the second time will be academically dismissed from the program.

For students in the thesis option, the student's thesis defense will serve as the comprehensive exam. A successful defense of a thesis will be deemed to satisfy the comprehensive examination requirement. There will be no written comprehensive exam required of MSME students in the thesis option.

Written Comprehensive Exam Rules for Students in the project or course-work option:

- 1. The test will be open-book; open-notes.
- 2. Each student must bring his/her own paper, writing instruments, books, and notes.
- 3. There will be no communication, sharing, or interaction of any kind between students during the examination. ANY VIOLATION OF THIS RULE WILL RESULT IN THE STUDENTS INVOLVED BEING EXPELLED FROM THE EXAMINATION ROOM AND RECEIVING A GRADE OF FAIL ON THE EXAMINATION.
- 4. Work is to be done only on one side of the papers to be turned in.
- 5. The areas covered are:
 - **Solid Mechanics**: Finite Element Analysis, Advanced Engineering Dynamics, Vibrations of Continuous Systems, Continuum Mechanics and Applied Elasticity
 - **Thermal Fluid Science**: Advanced Heat Transfer, Classical Thermodynamics, Advanced Fluid Mechanics, Compressible Fluid Flow and Continuum Mechanics
 - Mathematics: MA 507 and MA 508
- 6. Only four problems are to be turned in for grading: one in each of the three areas (Solid Mechanics, Thermal Fluid Science, Mathematics) and the fourth one can be in any area. ME 575 can count toward the requirement as either a solid-mechanics or a thermal-fluid-science course, but not both. If a student works more than four problems, he/she will be required to select only four problems to turn in.
- 7. Only line paper or engineering pad paper will be allowed.
- 8. Turn off all cell phones. Laptops and tablets are not allowed.

Sign-Up Information: The comprehensive exam will be administered once in the Fall and once in the Spring semester. It is the student's responsibility to sign up for the exam during the semester he or she wishes to take it.

- Sign-up location: M.E. department office
- **Sign-up period**: from the 3rd week to the 10th week of the semester.
- **Test date**: on Friday of the 12th week of the semester.
- Test time and location: to be announced.