Mechanical Engineering
Graduate Student Handbook

MASTER OF SCIENCE IN MECHANICAL ENGINEERING

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The University of Texas at Dallas

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Key: Old Content  New Content
Introduction

The faculty, staff and students in the Mechanical Engineering program would like to welcome you to the master’s program. This handbook is designed to provide information on policies and procedures in the MS program. This handbook, the Graduate Catalog and the Mechanical Engineering department website will serve as sources of information for you as you progress through our program. This is not an official document or supplement to the university catalog or other official publications. For official university policy regarding graduate studies, please see the UTD Graduate Catalog: http://catalog.utdallas.edu/

This handbook is subject to change in accordance with university and program amendments. Students are responsible for remaining updated and in compliance with policies throughout their attendance in the program and prior to graduation applications being processed. The policies set forth in this handbook default to new university policies that may be amended without notice. When changes occur, we will do our best to notify you in a timely manner. Check your UTD e-mail regularly. If there are questions not answered in this handbook or if you are unsure about policies and procedures, please contact the Mechanical Engineering Graduate Program Administrator.

Graduate Program Objectives

The program leading to the MS degree in Mechanical Engineering (ME) provides advanced studies for both recent baccalaureate graduates and experienced engineers in the following core areas: control & dynamic systems, manufacturing & design innovation, mechanics & materials, and thermal & fluid sciences.

The program is designed to provide advanced skills in mechanical engineering. The program also provides the foundation for a PhD degree in engineering or closely related disciplines.
Program Administration

The administration of the graduate program is divided among committees and individuals each having specific responsibilities. Their roles and responsibilities are described below. Two of the most important individuals with whom the student will interact are the faculty advisor and the graduate program administrator. Their roles are described in the Advising section.

Area Faculty:
The faculty who participate in teaching and research supervision within a particular degree program constitute that program’s Area Faculty. The Area Faculty are responsible for the program’s curriculum and requirements, advising and mentoring, and evaluation of student performance and progress. Most faculty participate in more than one degree program.

Graduate Studies Committee:
The role of the Graduate Studies Committee is to serve the needs of the graduate students and faculty in the department. It plays a role in developing, implementing, and monitoring policies and procedures including admissions, course scheduling, and the evaluation on qualifying papers and projects. Committee membership changes periodically.

Associate Department Head for Graduate Studies:
The Associate Department Head for Graduate Studies (Dr. Hongbing Lu) chairs the Graduate Studies Committee and oversees the graduate program.

Advising:

Faculty Advisor: Faculty Advisors are assigned by concentration area. The Faculty Advisor provides mentoring in research, guidance in course selections, assists in the preparation of the degree plan and provides career guidance. Under circumstances where a student is undecided on their concentration area upon entering the program, the student will be assigned a temporary Faculty Advisor. The student will be given until their second semester in the program to select a concentration area and meet with the appropriate Faculty Advisor. Students attending courses on a part-time basis will be given four semesters (or completion of twelve credit hours) to select a concentration area. Exception: If the student is defending a thesis, the student’s faculty Thesis Advisor will advise and sign in place of an assigned Faculty Advisor.

Graduate Program Administrator: The Mechanical Engineering Graduate Program Administrator may be consulted on any matter pertaining to graduate study. Issues related to admissions, degree requirements, registration, program procedures, credit transfers, and other student academic issues should be addressed to the Graduate Program Administrator. Currently, the Mechanical Engineering Graduate Program Administrator is Ashley Bradberry.
Getting Started in the Program

Orientation for International Students
All F-1 and J-1 visa holders must attend an International Student Orientation session. There will be multiple sessions offered leading up to the start of each semester. Students should register for their orientation session as early as possible. This orientation is required before students can be advised and register for classes.

Department Orientation & Meeting Graduate Program Advisors
All new students are required to attend the Mechanical Engineering New Graduate Student Orientation prior to registering in courses. Official announcements and invitations to this orientation will be sent by email from the Mechanical Engineering Department. Prior to attending this orientation session, students should review this handbook, the semester ME course offerings, the ME section of the Graduate Catalog, and the ME department website, and have a plan for which courses they wish to take. At this orientation, students will meet with a Faculty Advisor, and have their first semester courses approved for registration.

Registration and Obtaining UTD Identification (ID) Card
Once the required orientation session(s) have been completed, students may register for courses with the ME Graduate Program Administrator. After completing registration, students will be required to obtain a Comet Card, the official identification card for all UTD students, faculty, and staff. This card allows the use of campus facilities and services.

Comet Cards are issued at the Comet Center. The Comet Center is located on the second floor of the Student Union (north entrance).

Graduate Teaching and Research Assistants
Newly appointed TA’s and RA’s will be required to attend additional orientation sessions given separately by the Office of Graduate Studies, the ME department, and the Human Resources Office.

The Office of Graduate Studies orientation is a one day program.

The Office of Human Resources conducts an Employment Express event for all new employees. All new TA’s and RA’s must attend one of the scheduled Employment Express events to complete required forms which verify employment eligibility and set up payroll information.
Program Facilities

The Engineering and Computer Science Building and the Natural Science and Engineering Research Laboratory provide extensive facilities for teaching and research. These include wind tunnels, materials test systems with temperature chambers, nanoindenter, high impact facilities, ultra-high speed camera, 3D printers, computer clusters, 3D vibration measurement apparatus for microsystems, ultra-fast lasers, motion capture system, DMA, DSC, TGA, XPS, FTIR, NMR, XRD, µ-Raman, fluorescence spectrometer, AFM, FIB/SEM, and atomic resolution TEM. A Class 10000 microelectronics clean room facility, including e-beam lithography, sputter deposition, PECVD, LPCVD, etch, ash and evaporation, is available for student projects and research.

Machine Shop
The Mechanical Engineering Machine Shop gives students the experience of fabricating custom mechanical components or systems for class assignments, research and industry sponsors. The shop houses 10 computer stations with CAD Software, several (CNC) computer numeric control milling machines, lathes, welding machines, different types of saws, a CNC and manual plasma cutter, precision measuring equipment and numerous hand tools.

University Facilities

A campus map can be found on the university website: http://www.utdallas.edu/maps/

Office of Graduate Studies
The Office of Graduate Studies is located in the Founders Annex corridor, at FA 3.104. The staff in this office oversee degree requirements and develop and implement educational policy. Students will find helpful information and important deadlines on the Office of Graduate Studies website: http://www.utdallas.edu/dept/graddean/index.htm

Computer Labs
Computer Labs for student use can be found on campus in the following locations:
Solarium Engineering Open Access Lab (ECSN 4.324)

Eugene McDermott Library
The McDermott Library is a valuable resource for all students; housing books, reference material, a copy center and study areas.
Multicultural Center
The Multicultural Center is committed to providing quality cultural programs, educational resources and support services to the UT Dallas community.

Health Center
A health center is available to meet medical needs of students. A full description of the services offered by the health center can be found on the university website:
http://www.utdallas.edu/healthcenter/

Student Counseling Center
The Student Counseling Center provides programs and services designed to assist students with managing academic and personal demands more effectively.

Student Union
The Student Union has numerous facilities and offices of interest to all students. In it are four private meeting rooms, lounges, three food service areas, billiards and table tennis, and video game room. The Union is also home to the Comet Center, the Student Union and Activities Advisory Board (SUAAB), Child Care Center and Student Government. The Student Union offers opportunities for students, faculty and staff to relax, eat, have fun, learn, socialize and become an active part of the UTD community.

Visitor Center and University Bookstore
The Visitor Center and University Bookstore building includes amenities such as a coffee shop, the Technology Store, the Copy Center and a multipurpose room.

Activity Center
The Activity Center is available to all students, faculty and staff and contains a fitness center, four racquetball courts, two squash courts, four basketball courts, and a 25-yard swimming pool.

Career Center
Career Center counselors are available to assist students with the preparations of job searching.
https://www.utdallas.edu/career/students/

Online Information Resources
Information on NetID/password issues, email accounts, wireless network setup and general information on computer related problems can be found on the Information Resources website:
http://www.utdallas.edu/ir/
Application and Admission to Graduate Program

Application Process
A student applying for admission to the Mechanical Engineering Graduate Program must submit an application form and relevant supporting documentation to the UTD Office of Admission and Enrollment Services to be considered for admission and any form of university or school support, such as teaching assistantships and research assistantships.

It is the applicant’s responsibility to see that all parts of an application have arrived at UTD. Application status and receipt of materials may be checked via the online Applicant Center in Galaxy: http://www.utdallas.edu/status/

Requirements for Admission
To be considered for admission to the Mechanical Engineering master’s program, applicants should meet the following guidelines:

- A bachelor's degree in engineering or one of the natural sciences from an institution of higher education in the U.S. or from a comparable institution abroad,
- A grade point average (GPA) in upper-division quantitative coursework of 3.0 or better on a 4.0 point scale, and
- GRE revised scores of 150, 160, and 4 for the verbal, quantitative, and analytical writing components, respectively, are advisable based on our experience with student success in the program.
- Three letters of recommendation from individuals who are able to judge the candidate's potential for success in the master's degree program.
- An essay outlining the candidate's background, education, and professional goals.
- A detailed resume of all education and work history.
- All students, originating from countries where English is not one of the official national languages, must submit an acceptable English proficiency exam score. Minimum acceptable score guidelines can be obtained on the Graduate Admissions webpage for international students:
  http://www.utdallas.edu/admissions/graduate/international/toefl.php

Students from other engineering disciplines or from other areas of science or mathematics may be considered for admission to the program; however, additional coursework may be necessary to complete the master's program.
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A student lacking undergraduate prerequisites for graduate courses in mechanical engineering must complete these prerequisites or receive approval from the Faculty Advisor and the course instructor.

Achievement of specified minimum scores on standardized tests is not sufficient to ensure admission. The ME program faculty may change these criteria in order to improve the quality of the ME Graduate Program.

Types of Admission

Conditional Admission
Conditional admission may be granted to applicants who are deficient in undergraduate course work considered essential for graduate study. Graduate students, admitted on a conditional basis, will be notified in their department welcome letter of the deficiencies that must be corrected in order to attain full graduate standing. Conditionally admitted graduate students must meet with the Graduate Program Administrator each semester, prior to registration, to determine the remaining deficiencies in their academic program and have their course plan approved.

Non-Degree Seeking Option
Students who lack sufficient mechanical engineering background and/or fail to meet other program requirements may be eligible for admission under the Graduate Non-Degree Seeking program. A non-degree-seeking student must meet the same academic eligibility requirements and English proficiency requirements as ME graduate degree seeking students. Non-degree-seeking students who are ultimately admitted to a degree program may transfer no more than 15 credit hours of coursework taken as a non-degree student to that degree program. Students should consult the graduate catalog for additional details on the non-degree seeking option.
Mechanical Engineering Fast Track Program
In response to the need for advanced education in mechanical engineering, a Fast Track program is available to well-qualified UT Dallas undergraduate students. The Fast Track program is designed to accelerate a student's education so that both, BS and MS degrees can be earned in approximately five years of full-time study. The Fast Track program in Mechanical Engineering enables exceptionally gifted undergraduate students in their senior year to include approved master's level courses as part of an undergraduate degree plan. When Fast Track students graduate with a bachelor’s degree, they are automatically admitted to graduate school at UT Dallas without need to take the Graduate Record Exam (GRE). Qualified students may take up to 15 graduate semester credit hours that may be used to complete the baccalaureate degree and also to satisfy requirements for the master’s degree if these courses are completed with grades of B or better\(^1\). So, for example, a Fast Track undergraduate who passed 12 semester credit hours of well-chosen graduate coursework with grades of B or better would have only 33 (total number of required credit hours for master’s degree) – 12 (graduate credit hours taken as Fast Track) = 21 semester credit hours of graduate coursework left in order to complete the MS degree. This document explains the qualifications necessary to enter the program, the requirements to successfully complete the program, and the procedures to be followed by Fast Track students.

Admission Requirements
An undergraduate student in Mechanical Engineering qualifies to be admitted to the Mechanical Engineering Fast Track program if he or she meets all of the following qualifications:

- Has completed at least 15 semester credit hours at UT Dallas.
- Has repeated no more than 3 courses at UT Dallas and repeated no course more than once.
- Has an overall GPA for all college courses of at least 3.33.
- Has completed at least six of the following benchmark courses, corresponding to the student's major, with an average six course GPA of at least 3.5. The combined GPA in all benchmark courses should be at least 3.33:
  
  MECH 2330 Dynamics
  ENGR 3300 Advanced Engineering Mathematics
  MECH 3305 Computer Aided Design
  MECH 3310 Thermodynamics
  MECH 3315 Fluid Mechanics
  MECH 3320 Heat Transfer\(^2\)
  MECH 3351 Design of Mechanical Systems\(^2\)
  MECH 4301 Intermediate Mechanics of Materials
  MECH 4310 Systems and Controls\(^2\)

\(^1\) Once a student transitions into the graduate degree program, all university and department rules and policies are applied just as for a normally admitted graduate student. Fast Track credits cannot be applied to more than one master’s degree program.

\(^2\) Indicates a required course. These courses must be completed in order to qualify for the admission to the Fast Track program.
Application to the Fast Track Program

In order to ensure that all requirements are met, admission to the Fast Track program is facilitated and administered by the Office of the Associate Dean for Undergraduate Education (ADU). Download the appropriate application (corresponding to your intended MS degree), or obtain the application from the ECS Office of Undergraduate Advising (OUGA); submit the completed form to your undergraduate advisor by the posted deadline of your intended start term. After the deadline, Fast Track applications will be circulated for review by the ECS ADU, the Graduate Director or Associate Department Head for Graduate Studies related to the intended MS degree, the ECS Associate Dean for Academic Affairs, and the Dean of Graduate Studies. After the review is complete, you will receive an e-mail indicating the decision of the Graduate Program and a signed copy of the decision will be inserted in your file.

Students who are denied admission to the Fast Track program may apply to the graduate programs through the normal admission process. All necessary fees, test requirements, and any other admission criteria will apply.

Fast Track application deadlines:

Summer and Fall Terms – March 21  
Spring Term – October 21

Choice of MS Degree and Cross-Tracking

Undergraduate students who are enrolled in one BS program within the Jonsson School may request admission to a different MS program within the school. For example, MECH seniors may elect to Fast Track into other MS programs in the school: BMEN, EE, CE, CS, SE, MSEN, SEM or TE. Since cross-tracking from a different program requires additional courses that might not be required by the student’s BS major, careful and advanced planning is pertinent. The student should initiate an appointment with the Graduate Director or Associate Department Head of the MECH program to understand the MS requirements. Students must complete the necessary MECH benchmark course requirements in order to be eligible for admission into the MECH Fast Track program. If a student is accepted into a Fast Track program but decides to change the program, he/she must reapply for admission to the new program. Students planning to cross-track should select MS courses from the list of prerequisites and core courses for their intended MS major. Note that these graduate prerequisites or core courses may also have prerequisites. A complete list of these dependencies must be considered before the student can be sure of the cost of cross-tracking. This research can easily be completed by studying the online catalog at http://www.utdallas.edu/student/catalog/.

It may also be possible to cross-track to an MS degree in another school at UT Dallas. See the appropriate graduate advisor for details and advice. Note that Fast Track courses can only be applied to one approved MS degree program.
Choice of Graduate Courses

*Fast-Track* courses taken during the undergraduate senior year must be well chosen so that they satisfy the requirements of the BS degree AND those of the intended MS degree (note that many of the MS programs have tracks or concentration areas with different core requirements).

Prior to registration in master’s level courses, all newly admitted *Fast Track* students must attend a New *Fast Track* Student Orientation session organized by the chosen graduate program. Notice of the orientation dates will be emailed to newly admitted *Fast Track* students by the graduate program upon admission to the *Fast Track* program. The department will conduct two fast track graduate student orientations. In Spring for students entering the fast track program in Summer and Fall terms and in Fall for students entering the fast track program in Spring term. This orientation is mandatory prior to registration into the graduate courses of the MECH department.

Each semester thereafter, *Fast Track* undergraduate students must consult the ECS ADU and the Graduate Director or Associate Department Head of the graduate program before deciding on their graduate courses. Students will be permitted to take approved graduate courses that may be used to satisfy both BS and MS degree requirements. Only organized 5000 and 6000 level courses that are used for credit towards the MS degree can be used as *Fast Track* courses. An organized course is one that is posted in the schedule for classroom (or online) delivery. Independent study courses do not qualify.

*Fast Track* students may, with the advice of the ADU, fulfill some of their major course requirements, their undergraduate guided electives and/or their free electives by taking graduate-level courses. Those graduate courses should also be core or elective courses for the intended MS major.

Students should not take more than one 5000-level course because of limits on the number of 5000-level courses that can be used to satisfy the requirements of the corresponding MS degree. (Consult with an appropriate graduate advisor to ensure that the classes you plan to take can be used.)

Remaining in the *Fast Track* Program

In order to remain in good standing, a *Fast Track* student must fulfill the requirements.

1. Must maintain a GPA of at least 3.33 overall and at least 3.0 for graduate courses taken as an undergraduate *Fast Track* student.
2. Must earn a grade of B or better in all graduate courses. Courses in which a student earns a passing grade below B shall only count towards the BS degree and will not count for the MS degree.
3. Must not repeat more than three courses and must not repeat any course more than once.

If, at any time these requirements are not fulfilled, the student will be dropped from the *Fast Track* program. Any graduate credits successfully earned can be applied to the BS degree only, and the benefits of the *Fast Track* program will not apply. A student dropped from the *Fast Track* program shall not use these graduate courses towards a future graduate degree.
Matriculating to the Master’s Degree
Upon successful completion of the BS degree, a Fast Track student will transition to the appropriate MS degree program if they are in good standing. A graduate matriculation will be created for these students so that they can continue their studies towards their MS degree without any additional documentation or fees. In order to ensure a smooth transition, students are required to attend the new graduate student orientation session offered by the graduate department prior to enrolling in courses as a new graduate student. Subsequently, students must meet with an MS program graduate advisor and declare their concentration area by submitting an approved degree plan by the end of the first semester in graduate school.

Taking a Break Between the Two Degrees
The rules for re-admission apply to students that wish to take a break between their completion of the BS degree and continuation of their graduate studies. Students that take off three long semesters (or more - not counting summers) need to reapply for admission to the graduate program and will lose their Fast Track privileges (including waiver of the GRE requirement). As per the UT Dallas Graduate Catalog, a new review will be made to determine eligibility of enrollment under current standards for admission. If accepted, the readmitted student will be bound by all conditions of the catalog in force at the time of readmission. For instances in which students must reapply, their graduate course requirements must be discussed and approved by the corresponding graduate program.

Taking Breaks During Graduate Studies; Minimum Course Load
Once you are a graduate student, you are governed by the rules for all graduate students. There is no minimum course load, and you can take breaks, as outlined in the graduate catalog, but you must complete your MS degree within six years. Consult a graduate advisor for more details.
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Funding Opportunities

Full-time graduate students have three options for financial assistance through the Department of Mechanical Engineering and all three are highly competitive. (Part-time students are not eligible for financial assistance.) Students desiring financial assistance are encouraged to apply to our graduate program as early as possible.

**Jonsson School Graduate Study Scholarship** is a $1,000 competitive, merit-based scholarship awarded to incoming graduate students during the fall semester. All students entering M.S. or Ph.D. studies in Mechanical Engineering are eligible to apply. The Jonsson School Graduate Study Scholarship Application can be found on the Jonsson School Scholarship page online. (http://ecs.utdallas.edu/students/scholarships.html)

**Teaching Assistants (TAs)** are selected and supported by the Mechanical Engineering Department based on students’ academic merit and prior research experience. After admission to the ME Department, students may be considered by the department's selection committee for teaching assistantships. If selected for a TA position in their first semester, new students will be notified by an email sent to their UT Dallas e-mail address. Current students will be required to submit a TA application each semester they would like to be considered for a TA position. TA applications can be completed through the electronic application found here, and must be submitted to the Mechanical Engineering Department office (ECSN 2.7).

**Research Assistants (RAs)** are supported by individual Mechanical Engineering faculty through faculty members’ research grants. Prospective students may contact faculty members directly to discuss their research interests and possible RA support.

Funding opportunities are competitive, merit-based and can range from a small stipend to a full assistantship with tuition assistance depending upon available funding. Students who intend to seek funding should apply for admission as a doctoral track student to be considered for university funding lines, as there are extremely limited funding opportunities for master’s students. Funding is always dependent upon budgets from year to year, is not guaranteed, and is also contingent upon adequate progression in coursework and academic standing as well as satisfactory performance of all job responsibilities and requirements. Funded students must abide by all pertinent UTD policies and procedures, including those pertaining to academic dishonesty.
Registration

Students pursuing a full-time program of graduate study should register for a minimum of nine credit hours each long semester and six credit hours each summer semester (registration in summer semesters is optional). General registration requirements are available in the Graduate Catalog and on the university Registrar’s website: http://www.utdallas.edu/student/registrar/

All MS students will be required to obtain approval on a registration form from a Faculty Advisor prior to registering in their first semester in the program. After filing a degree plan, MS students are encouraged to meet with their Faculty Advisor each semester to discuss their degree plan and course registration, but it will not be required for registration.

Non-Thesis Student Registration:
Non-thesis option students are eligible to register online after their first semester as long as they continue to follow the courses approved on their degree plan and maintain good academic standing with at least a 3.0 cumulative GPA.

Thesis Student Registration:
Thesis option students will be required to obtain approval from their Thesis Advisor for course registration each semester.

Faculty Advisor:
MS Thesis—Thesis Advisor
MS Non-Thesis—Concentration Area Chair

All students may register through the Graduate Program Administrator by submitting a signed registration form or by emailing a complete registration request from their UTD email account. In email requests, students must provide the course title and section, class number, instructor, semester of request, and Faculty Advisor/instructor approval (if required). Email registration requests are only accepted if the above information is included and if the request is sent from the student’s UTD email account. Occasionally, there are “holds” placed on student accounts. Holds most commonly result from missing documents, unpaid fees, or financial aid issues. All holds must be resolved before the student can register.

Registration for Research and Thesis Courses
Permission from the faculty member is required prior to registration in Research or Thesis hours. Approval can be supplied on a paper registration form or through an email request.

MECH 6V97 Research in Mechanical Engineering
MECH 6V98 Thesis
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Registration Change Procedure (Add/Drop)
Courses may be dropped online through the last day to withdraw, as designated by the Registrar on the Academic Calendar. Courses may be dropped without entry to the academic record until the date designated as such, normally within the first three weeks of the semester; after this date, the course will be graded W or F, at the discretion of the instructor.

Degree Plan and Academic Standing
All MS students must submit an approved degree plan within the first two semesters of active enrollment in the program. The purpose of this plan is to show how and when requirements will be met. Degree plans should be initiated by the student and Faculty Advisor with the guidance of the ME Associate Department Head. The degree plan is a working document and may be updated regularly to reflect the student’s developing research focus and career goals.

Degree Requirements
Students seeking a Master of Science in Mechanical Engineering degree must complete 33 semester hours.

All students must have a Faculty Advisor and an approved degree plan on file. The degree plan is based upon the student’s choice of concentration area. Courses taken without advisor approval will not count towards the 33 semester hour requirement.

The Mechanical Engineering master’s program has both a thesis and a non-thesis option. All part-time students will be assigned initially to the non-thesis option. Those wishing to elect the thesis option may do so by obtaining the approval of a faculty Thesis Advisor on a degree plan.

Thesis Option
All full-time, supported students are required to participate in the thesis option. The thesis option requires three semester hours of research, three semester hours of thesis, a written thesis submitted to the Graduate School, and a formal public defense of the thesis. A supervising committee administers this defense and is chosen in consultation with the student’s Thesis Advisor prior to enrolling for thesis credit. Thesis hours cannot be counted in the Mechanical Engineering MS degree plan unless a thesis is written and successfully defended.

Non-Thesis Option
Master students who do not wish to participate in the thesis option will be required to take additional coursework to satisfy the total semester hour requirement. With the prior approval of a Faculty Advisor, non-thesis students may count no more than three semester hours of research or individual instruction courses towards the 33 hour degree requirement.
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Master of Science in Mechanical Engineering Degree Plan Details
A MS student in Mechanical Engineering must take one core course from each of the four concentration areas in the list below, must receive a grade of B- or better in each of the core courses, and must maintain a minimum 3.0 GPA in their core courses.

Dynamic Systems and Control
MECH 6300 (EECS 6331, SYSM 6307) Linear Systems
MECH 6314 (SYSM 6306, BMEN 6372) Engineering Systems: Modeling and Simulation

Manufacturing and Design Innovation
MECH 6303 Computer Aided Design

Mechanics and Materials
MECH 6306 Continuum Mechanics
MECH 6350 Advanced Solid Mechanics

Thermal and Fluid Sciences
MECH 6370 Incompressible Fluid Mechanics
MECH 6373 Convective Heat Transfer
MECH 6374 Conductive and Radiative Heat Transfer

Prescribed Electives within Concentration Areas
Students must take at least three prescribed elective courses from one concentration area. Courses counted towards satisfying the core requirement cannot be counted towards satisfying requirements on prescribed electives. All electives must be approved by the Faculty Advisor.

Dynamic Systems and Controls (DSC)
MS students must take at least three courses from one concentration area.

MECH 5308 (EECS 5375) Introduction to Robotics
MECH 5310 Intermediate Dynamics
MECH 6300 (EECS 6331, SYSM 6307) Linear Systems
MECH 6311 Advanced Mechanical Vibrations
MECH 6312 (EECS 6349) Random Processes
MECH 6313 (EECS 6336, BMEN 6388, SYSE 6324) Nonlinear Systems
MECH 6314 (SYSM 6306, BMEN 6372) Engineering Systems: Modeling and Simulation
MECH 6316 (SYSE 6322) Digital Control of Automotive Powertrain Systems
MECH 6317 (EECS 6302, SYSM 6302) Dynamics of Complex Networks and Systems
MECH 6318 (SYSM 6305) Optimization Theory and Practice
MECH 6323 (SYSE 6323, EECS 6323) Robust Control Systems
MECH 6324 (EECS 6324) Robot Control
MECH 6V29 Special Topics in Controls and Dynamic Systems
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Manufacturing and Design Innovation (MDI)
MS students must take at least three courses from one concentration area.

- **MECH 6311** Advanced Mechanical Vibrations
- **MECH 6314** (BMEN 6372, SYSM 6306) Engineering Systems: Modeling and Simulation
- **MECH 6317** (EECS 6302, SYSM 6302) Dynamics of Complex Networks and Systems
- **MECH 6318** (SYSM 6305) Optimization Theory and Practice
- **MECH 6330** Multiscale Design and Optimization
- **MECH 6333** Materials Design and Manufacturing
- **MECH 6334** Smart Materials and Structures
- **MECH 6335** (OPRE 6340) Flexible Manufacturing Strategies
- **MECH 6337** (SYSM 6301) Systems Engineering, Architecture and Design
- **MECH 6338** Reliability-Based Design
- **MECH 6341** (EEMF 6348, MSEN 6348) Lithography and Nanofabrication
- **MECH 6347** (EEMF 6382, MSEN 6382) Introduction to MEMS
- **MECH 6348** (EEMF 6322, MSEN 6322) Semiconductor Processing Technology
- **MECH 6353** Computational Mechanics
- **MECH 6354** Experimental Mechanics
- **MECH 6V49** Special Topics in Manufacturing and Design Innovation

Thermal and Fluid Sciences (TFS)
MS students must take at least three courses from one concentration area.

- **MECH 5370** Introduction to Wind Energy
- **MECH 5372** Introduction to Compressible Fluid Mechanics
- **MECH 5373** Thermal Management of Microelectronics
- **MECH 5376** Introduction to Computational Thermal Fluid Science
- **MECH 5383** (EEMF 5383, MSEN 5383, PHYS 5383) Plasma Technology
- **MECH 6370** Incompressible Fluid Mechanics
- **MECH 6371** Computational Fluid Dynamics
- **MECH 6372** Turbulent Flows
- **MECH 6373** Convective Heat Transfer
- **MECH 6374** Conductive and Radiative Heat Transfer
- **MECH 6375** Boiling Heat Transfer and Two-Phase Flow
- **MECH 6376** Experimental Thermal and Fluid Dynamics
- **MECH 6377** Advanced Thermodynamics
- **MECH 6383** (EEMF 6383, PHYS 6383) Plasma Science
- **MECH 6V89** Special Topics in Thermal and Fluid Sciences
Mechanics and Materials (MM)
MS students must take at least three courses from one concentration area.

MECH 6306 Continuum Mechanics
MECH 6350 Advanced Solid Mechanics
MECH 6351 Finite Element Techniques I
MECH 6353 Computational Mechanics
MECH 6354 Experimental Mechanics
MECH 6355 Viscoelasticity
MECH 6356 Fracture Mechanics
MECH 6367 (MSEN 6310) Mechanical Properties of Materials
MECH 6368 (MSEN 6350) Imperfections in Solids
MECH 6V69 Special Topics in Mechanics and Materials

Students participating in the non-thesis option must also take four graduate level electives. Students participating in the thesis option must take two graduate level electives, in addition to the research and thesis course requirements. All electives must be approved by the Faculty Advisor. Students may request no more than two 5000-level courses be counted in their Mechanical Engineering MS degree plan. Other than the cross-listed courses in the prescribed elective section of the MSME degree plan, courses offered by the School of Management (OPRE, FIN, MKT, OB, etc.) will not be counted towards the MSME degree plan (this includes courses cross-listed with Systems Engineering (SYSM) and taught by SOM faculty).

Graduate Transfer Credit Policies

A MS student may request to have up to eight hours of graduate level coursework taken at another accredited university applied toward their degree plan upon approval. Students must earn a grade of B or better in the course for it to be considered eligible for transfer. All requests for transfer of credit should be approved by the student’s Faculty Advisor on the Transfer of Credit Request form, along with an official degree plan, and submitted to the Graduate Program Administrator. Transfer credit will be applied to the degree plan only after the student has completed nine credit hours of coursework at UT Dallas and maintained a 3.0 GPA. All petitions must be received and approved prior to the student’s graduating semester; transfer requests received in the student’s graduating semester will not be processed.

Submission Deadlines: Fall 2016 – October 14    Spring 2017 – March 10

Final transfer credit determinations will be awarded in accordance with the policies and procedures outlined in the Graduate Catalog after a review of official transcripts and course descriptions provided by the student.
Time Limits
All requirements for the master’s degree must be completed within one six-year period. Work exceeding these limits, whether done at this university or elsewhere, will not count towards the degree. Exceptions to time limit specifications must be approved by the Dean of Graduate Studies.

Per the Graduate Catalog, all requirements for a graduate degree, including transfer credit, must be completed within the specified time period. Students exceeding the specified time limit will not be eligible for their degrees and will be dismissed from the graduate program. An approved leave of absence will not alter the time limits placed on graduate degrees.

Catalog Policy
Provided the requisite courses continue to be offered, students are bound by the coursework requirements of the catalog in force at the time of their admission, within a six-year limit for the completion of the master’s degree. This regulation applies to specific coursework and the number of credit hours for the academic degrees set forth in the catalog. All other requirements will change or be continued with the issuance of supplements to the graduate catalog and subsequent revisions to the handbook.

Dual Master’s Degrees
Students are allowed to pursue additional master’s degrees at The University of Texas at Dallas. To the extent that the requirements of some master’s degrees overlap, up to fifteen credit hours taken in pursuit of previously earned master’s degrees at UT Dallas may be counted toward an additional master’s degree. The only limitation is that more than one-half of the credit hours for any master’s degree earned at UT Dallas must be satisfied by new coursework. Thus, any student wishing to gain a MS in Mechanical Engineering as an additional master’s degree is required to take a minimum of 18 hours of new coursework from this program. A student is required to develop an approved plan of studies through the Mechanical Engineering Department prior to enrolling in a dual degree. Similarly, a student wishing to earn two master’s degrees concurrently must develop an approved plan of studies through both relevant departments and programs. All coursework for any degree must meet the academic standards of that degree.
Academic Standing
Registration in the graduate programs beyond the first semester is contingent on the student’s being in good academic standing based on three main factors:

- Satisfactory progress in meeting admission conditions that were imposed at the time of admission
- Maintenance of a 3.0 cumulative grade point average
- Satisfactory progress in meeting program degree requirements

If, at the end of a semester, a student’s cumulative grade point average is below 3.0, the student will be placed on academic probation. The student must earn sufficient grade points during the next two semesters of registration to raise the cumulative grade point average to at least 3.0 exclusive of incomplete (I) grades. Failure to achieve this 3.0 cumulative grade point average will result in immediate dismissal from the University.

While on academic probation, students will not be permitted to register in courses until the current semester grades have posted and the student has received permission from their Faculty Advisor on a registration form. The student will also need to meet with the Graduate Program Administrator at the end of each semester they are on probation, prior to registration, until the student has successfully raised their GPA to a 3.0 or better.

Graduate Grading and Grade Point Average
The following grading scale is used in all Graduate coursework at the University:

<table>
<thead>
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<th>GRADE</th>
<th>GRADE POINTS PER SEMESTER HOUR</th>
<th>DESCRIPTION</th>
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<tr>
<td>A</td>
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</tr>
<tr>
<td>A-</td>
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<tr>
<td>B+</td>
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<tr>
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<td>2.67</td>
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</tr>
<tr>
<td>C+</td>
<td>2.33</td>
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<td>C</td>
<td>2.00</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>0.00</td>
<td>Failure of either a Pass/Fail or Graded Course</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>Grades of I, P, &amp; W do not produce grade points</td>
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<tr>
<td>P</td>
<td>Pass</td>
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</tr>
<tr>
<td>W</td>
<td>Withdraw</td>
<td>Grades of I, P, &amp; W do not produce grade points</td>
</tr>
</tbody>
</table>
Thesis Guide and Requirements

Students are encouraged to select a thesis topic in their area of specialization within the field of Mechanical Engineering. Thesis work is a valuable learning experience in which students have the opportunity to develop their abilities to search the literature, plan, analyze, experiment, evaluate, present and defend their work in addition to achieving degree specialization.

The thesis topic and Thesis Advisor should be selected as soon as possible in the student’s overall program. It is the policy of the department that the selection of a thesis topic and Thesis Advisor be a voluntary process which is initiated by the student.

Thesis Advisor

The Thesis Advisor must either be Mechanical Engineering faculty or an affiliate faculty member and should be a voting member of the General Faculty holding the rank of Professor, Associate Professor, or Assistant Professor. The Thesis Advisor will assist the student in developing a research topic, conducting research related to the thesis, and periodically assess the student’s progress and accomplishments. The Thesis Advisor will also usually serve as the Chair to the student’s supervising committee and assumes the primary responsibility for guiding the student to completion of the thesis as long as the student continues to make reasonable progress.

Supervising Committee

The supervising committee is appointed to approve a thesis topic, provide advice, and review and evaluate the written thesis and oral defense. Students should form a supervising committee by the beginning of their third semester in the program. The supervising committee consists of three UTD faculty members with one of the three designated as the Chair (usually the Thesis Advisor). Additional faculty or subject area experts from inside or outside the university may be selected; however, no more than one external member will be approved. At least half of the committee members must be Mechanical Engineering faculty (or affiliate faculty members). The composition of the supervising committee must follow the guidelines contained in the UT Dallas policy memorandum, “Policy on Procedures for Completing a Graduate Degree,” which is located on the Graduate Studies website.

When the committee has been formed, the student submits the Thesis Committee Appointment form signed by the proposed members of the committee to the Mechanical Engineering Graduate Program Administrator. Approval has to be first made by the Graduate Studies Committee in the department office. Final approval of the supervising committee is made by the UT Dallas Dean of Graduate Studies.
Thesis Proposal
Communication between the student and the supervising committee is an important factor in the successful completion of a thesis. Since the student is the central figure in a thesis project, he/she should strive to maintain communication. Preparation of a written thesis proposal (at the early stage of research) with an oral presentation to the supervising committee is strongly encouraged and is an excellent way of establishing early communication. The thesis proposal should include a plan for subsequent meetings or other forms of communication.

Thesis Submission
When the thesis research is essentially complete, a written final draft is prepared by the student. In general, the thesis will have already gone through several preliminary drafts, and the supervising committee will have set forth specific requirements concerning the final draft.

The final draft is submitted to the supervising committee for critical review before scheduling the oral thesis defense. The student should allow the supervising committee ample time to review the work. Action on a draft submitted less than one month before the date on which the completed thesis is due may be deferred until the next semester.

After the supervising committee has approved the final draft, the student and the Chair of the committee (usually the Thesis Advisor) will schedule the oral thesis defense. The Thesis Advisor will instruct the student regarding specific material which must be prepared for the examination.

Information concerning thesis format and submission is detailed on the Graduate Studies website.

Thesis Defense
The Chair of the student’s supervising committee will assist the student in arranging the date, place and time of the thesis defense. The student will submit the final draft of the thesis to the supervising committee at least one month before the examination date. The defense should include an uninterrupted summary of the thesis by the student, an oral defense of the thesis, and a question period led by the supervising committee. The thesis defense is important and should be well prepared. Visual aids are recommended for the defense. The examination lasts approximately one hour. Visitors may be invited to attend the thesis defense, but they will not be permitted to remain during the question period.

The decision of the supervising committee is rendered immediately after the defense. If the student does not pass the defense, then the committee will decide upon a future course of action. The committee will complete and sign the Thesis Results Form and the student will submit the form to the Graduate Program Administrator in the Mechanical Engineering Department Office.
Career Advising

Career advising and job search resources are available to mechanical engineering students through the UT Dallas Career Center. The Engineering and Computer Science Career Consultant can provide assistance with interview preparations, resume writing, and tools for conducting an effective job search. Students are encouraged to schedule an appointment with the ECS Career Consultant before graduating. (http://www.utdallas.edu/career/)

Graduation

In the semester a student intends to graduate, there are several important deadlines they must meet and fees that are to be paid. Students should check the Office of Graduate Studies website (http://www.utdallas.edu/dept/graddean/) and the University Registrar’s website (http://www.utdallas.edu/student/registrar/graduation/) for these deadlines and fees.

The graduate student has the responsibility to notify the Graduate Program Administrator in the Mechanical Engineering Department of their intent to graduate at least one semester prior to their expected graduation to ensure that they have met all departmental and university requirements.

Application for graduation is now handled online. The student must apply for graduation by the posted deadline through their Galaxy account.
APPENDICES

A. Acknowledgment of Policies Form
B. Mechanical Engineering MS Degree Plans
C. Transfer of Credit Request Form
D. Committee Appointment Form
E. Thesis Results Form

F. Graduation Checklist
**Master’s & PhD Acknowledgment of Policies Form**

**All students must complete, sign, and date this form upon entrance to the Graduate ME Department**

<table>
<thead>
<tr>
<th>Name (Last, First):</th>
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<tr>
<th>UTD ID Number:</th>
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<tr>
<th>Program Start (semester &amp; year):</th>
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</table>

Program of study:  
- □ MS  
- □ PhD

Degree plan (check one):  
- □ Dynamic Systems and Controls (DSC)  
- □ Manufacturing and Design Innovation (MDI)  
- □ Mechanics and Materials (MM)  
- □ Thermal and Fluid Sciences (TFS)

Prerequisites I was assigned in my admission letter/email (check all that apply):  
- □ Leveling Courses: 
- □ Other: 

By initialing each item below, I confirm that I have read and understand the following policies of The University of Texas at Dallas and the Graduate Mechanical Engineering Department:

- _____ I must complete all assigned prerequisites unless it has been officially waived by the department or is not a requirement of my degree plan.
- _____ I must meet with a Faculty Advisor at least once a year to be advised.
- _____ There is a 6-year window to complete all MS coursework. *MS Only
- _____ There is a 10-year window to complete all PhD coursework. *PhD Only
- _____ I must have a core GPA ≥ 3.0 and a cumulative GPA ≥ 3.0 to graduate.
- _____ I know a course may be repeated one time and I can repeat no more than three courses.
- _____ I must make up any incomplete (I) grades by the deadline or it will turn into an F on my transcript.
- _____ I know as a PhD student I must add the correct MS program 2 semesters before I intend to graduate with my MS. *PhD Only
- _____ I know that if I miss three or more lectures in the beginning of any semester, I may be dropped or reassigned to another course in that semester.
- _____ I know I cannot enroll in courses while on Academic Probation until the current semester grades are posted and I have permission from my Faculty Advisor.

______________________________  __/__/____  
Student Signature  Date
APPENDIX B

Mechanical Engineering MS Degree Plan
**MUST COMPLETE ONE CORE COURSE FROM EACH OF THE FOUR GROUPS BELOW** **Must earn “B-” or better & core GPA of 3.0**:

### Dynamic Systems & Control (select one)

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>COURSE TITLE</th>
<th>SEMESTER</th>
<th>PREREQ or Equivalent</th>
<th>GRADE</th>
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<td>MECH 6300</td>
<td>Linear Systems</td>
<td>MECH 4310</td>
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</tr>
<tr>
<td>MECH 6314</td>
<td>Engineering Systems: Modeling and Simulation</td>
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### Manufacturing & Design Innovation

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>COURSE TITLE</th>
<th>SEMESTER</th>
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<th>GRADE</th>
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### Mechanics & Materials (select one)

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<td>MECH 6350</td>
<td>Advanced Solid Mechanics</td>
<td>MECH 4301</td>
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### Thermal & Fluid Sciences (select one)

<table>
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<th>COURSE #</th>
<th>COURSE TITLE</th>
<th>SEMESTER</th>
<th>PREREQ or Equivalent</th>
<th>GRADE</th>
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<td>MECH 6374</td>
<td>Conductive and Radiative Heat Transfer</td>
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**COMPLETE THREE (3) PRESCRIBED ELECTIVES FROM THE FOLLOWING:**


<table>
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<tr>
<th>COURSE #</th>
<th>COURSE TITLE</th>
<th>SEMESTER</th>
<th>Advisor Approval</th>
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**MUST COMPLETE FOUR (4) ADDITIONAL, APPROVED GRADUATE LEVEL COURSES (“Free Electives”):**

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<tr>
<th>COURSE #</th>
<th>COURSE TITLE</th>
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__________________________
Student Signature
__________________________
Advisor Signature
__________________________
ME Assoc Dept Head (Transfer Only)
__________________________
Date
__________________________
Date
__________________________
Date

**Note:** This form should be filled out and filed with the Mechanical Engineering office before finishing your second semester. Any Non-ME courses must be approved before registering in the course.

Rev. 4/16
M.S.M.E. Total of 33 Credit Hours

Choose one (1) of four Core Concentrations:
- Dynamic Systems & Controls (DSC)
- Manufacturing & Design Innovation (MDI)
- Mechanics & Materials (MM)
- Thermal & Fluid Sciences (TFS)

MANUFACTURING AND DESIGN INNOVATION (MDI)

MUST COMPLETE ONE CORE COURSE FROM EACH OF THE FOUR GROUPS BELOW **Must earn “B-” or better & core GPA of 3.0**:

### Dynamic Systems & Control (select one)

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>COURSE TITLE</th>
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<td>MECH 6314</td>
<td>Engineering Systems: Modeling &amp; Simulation</td>
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### Manufacturing & Design Innovation

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### Mechanics & Materials (select one)

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### Thermal & Fluid Sciences (select one)

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<td>MECH 6374</td>
<td>Conductive and Radiative Heat Transfer</td>
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COMPLETE THREE (3) PRESCRIBED ELECTIVES FROM THE FOLLOWING:

MECH 6311 Advanced Mechanical Vibrations  MECH 6314 (BMEN 6372, SYSM 6306) Engineering Systems: Modeling & Simulation
MECH 6317 (EECS 6302, SYSM 6302) Dynamics of Complex Networks & Systems  MECH 6318 (SYSM 6305) Optimization Theory & Practice
MECH 6330 Multiscale Design & Optimization  MECH 6333 Materials Design & Manufacturing  MECH 6334 Smart Materials and Structures
MECH 6335 (OPRE 6340) Flexible Manufacturing Strategies  MECH 6337 (SYSM 6301) Systems Engineering, Architecture & Design
MECH 6338 Reliability-Based Design  MECH 6341 (EEMF 6348, MSEN 6348) Lithography & Nanofabrication
MECH 6347 (EEMF 6382, MSEN 6382) Introduction to MEMS  MECH 6348 (EEMF 6322, MSEN 6322) Semiconductor Processing Technology
MECH 6353 Computational Mechanics  MECH 6354 Experimental Mechanics  MECH 6V49 Special Topics in MDI

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MUST COMPLETE FOUR (4) ADDITIONAL, APPROVED GRADUATE LEVEL COURSES (“Free Electives”):

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________________________________________________________  ______________________
Student Signature                                      Date

________________________________________________________  ______________________
Advisor Signature                                       Date

________________________________________________________  ______________________
ME Assoc Dept Head (Transfer Only)                      Date

Note: This form should be filled out and filed with the Mechanical Engineering office before finishing your second semester. Any Non-ME courses must be approved before registering in the course.

Rev. 4/16
MASTER OF SCIENCE in MECHANICAL ENGINEERING (M.S.M.E.)  Total of 33 Credit Hours
Choose one (1) of four Core Concentrations: Dynamic Systems & Controls (DSC)  Manufacturing & Design Innovation (MDI)  Mechanics & Materials (MM)  Thermal & Fluid Sciences (TFS)

MECHANICS AND MATERIALS (MM)

NAME ___________________________________________  UTD ID ____________________________________________

MUST COMPLETE ONE CORE COURSE FROM EACH OF THE FOUR GROUPS BELOW  **Must earn “B-” or better & core GPA of 3.0**:  

Dynamic Systems & Control (select one)

<table>
<thead>
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<th>COURSE #</th>
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Manufacturing & Design Innovation

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Mechanics & Materials (select one)

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<th>PREREQ or Equivalent</th>
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<td>Advanced Solid Mechanics</td>
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Thermal & Fluid Sciences (select one)

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<th>COURSE #</th>
<th>COURSE TITLE</th>
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<td>Convective Heat Transfer</td>
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<td>MECH 6374</td>
<td>Conductive and Radiative Heat Transfer</td>
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</table>

COMPLETE THREE (3) PRESCRIBED ELECTIVES FROM THE FOLLOWING:
MECH 6306 Continuum Mechanics  MECH 6350 Advanced Solid Mechanics  MECH 6351 Finite Element Techniques I  
MECH 6353 Computational Mechanics  MECH 6354 Experimental Mechanics  MECH 6355 Viscoelasticity  MECH 6356 Fracture Mechanics  
MECH 6367 (MSEN 6310) Mechanical Properties of Materials  MECH 6368 (MSEN 6350) Imperfections in Solids  MECH 6V69 Special Topics in MM

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>COURSE TITLE</th>
<th>SEMESTER</th>
<th>Advisor Approval</th>
<th>GRADE</th>
</tr>
</thead>
</table>

MUST COMPLETE FOUR (4) ADDITIONAL, APPROVED GRADUATE LEVEL COURSES (“Free Electives”):

<table>
<thead>
<tr>
<th>COURSE #</th>
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<th>Advisor Approval</th>
<th>GRADE</th>
</tr>
</thead>
</table>

_____________________________________________  ________________________  
Student Signature                           Date

_____________________________________________  ________________________  
Advisor Signature                            Date

_____________________________________________  ________________________  
ME Assoc Dept Head (Transfer Only)            Date

Note: This form should be filled out and filed with the Mechanical Engineering office before finishing your second semester. Any Non-ME courses must be approved before registering in the course.

Rev. 4/16
MASTER OF SCIENCE in MECHANICAL ENGINEERING (M.S.M.E.)  Total of 33 Credit Hours
Choose one (1) of four Core Concentrations: Dynamic Systems & Controls (DSC)  Manufacturing & Design Innovation (MDI)  Mechanics & Materials (MM)  Thermal & Fluid Sciences (TFS)

THERMAL AND FLUID SCIENCES (TFS)

| NAME | UTD ID |
|--------------------------------|

MUST COMPLETE ONE CORE COURSE FROM EACH OF THE FOUR GROUPS BELOW **Must earn “B-” or better & core GPA of 3.0**: 

### Dynamic Systems & Control (select one)

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>COURSE TITLE</th>
<th>SEMESTER</th>
<th>PREREQ or Equivalent</th>
<th>GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MECH 6300</td>
<td>Linear Systems</td>
<td></td>
<td>MECH 4310</td>
<td></td>
</tr>
<tr>
<td>MECH 6314</td>
<td>Engineering Systems: Modeling and Simulation</td>
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</table>

### Manufacturing & Design Innovation

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>COURSE TITLE</th>
<th>SEMESTER</th>
<th>PREREQ or Equivalent</th>
<th>GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>MECH 6303</td>
<td>Computer Aided Design</td>
<td></td>
<td>MECH 3305</td>
<td></td>
</tr>
</tbody>
</table>

### Mechanics & Materials (select one)

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>COURSE TITLE</th>
<th>SEMESTER</th>
<th>PREREQ or Equivalent</th>
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</tr>
</thead>
<tbody>
<tr>
<td>MECH 6306</td>
<td>Continuum Mechanics</td>
<td></td>
<td>MECH 4301</td>
<td></td>
</tr>
<tr>
<td>MECH 6350</td>
<td>Advanced Solid Mechanics</td>
<td></td>
<td>MECH 4301</td>
<td></td>
</tr>
</tbody>
</table>

### Thermal & Fluid Sciences (select one)

<table>
<thead>
<tr>
<th>COURSE #</th>
<th>COURSE TITLE</th>
<th>SEMESTER</th>
<th>PREREQ or Equivalent</th>
<th>GRADE</th>
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</thead>
<tbody>
<tr>
<td>MECH 6370</td>
<td>Incompressible Fluid Mechanics</td>
<td></td>
<td>MECH 3315</td>
<td></td>
</tr>
<tr>
<td>MECH 6373</td>
<td>Convective Heat Transfer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MECH 6374</td>
<td>Conductive and Radiative Heat Transfer</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

COMPLETE THREE (3) PRESCRIBED ELECTIVES FROM THE FOLLOWING:

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MUST COMPLETE FOUR (4) ADDITIONAL, APPROVED GRADUATE LEVEL COURSES (“Free Electives”):

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</tr>
</thead>
</table>

_________________________  ______________________ |
Student Signature  Date  
_________________________  ______________________ |
Advisor Signature  Date  
_________________________  ______________________ |
ME Assoc Dept Head (Transfer Only)  Date  

Note: This form should be filled out and filed with the Mechanical Engineering office before finishing your second semester. Any Non-ME courses must be approved before registering in the course.

Rev. 4/16
APPENDIX C

Transfer of Credit Request Form
TRANSFER OF CREDIT REQUEST

All transfer credits should be completed during the first semester and must be completed before the semester in which the student plans to graduate. No transfer requests will be accepted for review for non-degree students. The Department of Mechanical Engineering holds the student responsible for attaching all copies of course descriptions, syllabi, and transcripts to the transfer request and for providing official transcripts to the Office of Student Records.

Name (please type or print) ____________________________  Student UTD ID ____________________________

Transfer credits to be applied to ____________________________ degree at UTD.

Degree sought (circle one):  MS  PhD  Other__________________  Concentration _______________________

Address ____________________________  City, State ____________________________  Zip Code ____________________________

Work Phone ____________________________  Home Phone ____________________________  Cell Phone ____________________________  E-mail Address ____________________________

UTD course to be replaced by transfer course:

<table>
<thead>
<tr>
<th>Prefix &amp; Course #</th>
<th>Course Title</th>
</tr>
</thead>
</table>

For a course to be transferred, the student must have completed an equivalent graduate level course at another accredited university with a grade of B or better. UTD does not award transfer credit for experiential learning, performance or work experience. Transfer course grades will not be averaged into your overall UTD GPA. Applicable coursework cannot be more than 6 years old for master’s degrees; more than 8 years old for students whose master’s degrees are accepted for full credit; or more than 10 years old for doctoral degrees.

Course the student in submitting to replace the UTD course:

<table>
<thead>
<tr>
<th>Course #</th>
<th>Course Name</th>
<th>Credit Hours</th>
<th>Grade</th>
<th>Institution</th>
<th>Date Taken</th>
</tr>
</thead>
</table>

If this course is in a different discipline than the degree program, please attach an explanation of relevance of the course to be transferred for the student’s research (for doctoral students, for their dissertation topics).

To the Dean of Graduate Studies:
The applicant’s file has been reviewed and the school/department signature(s) below certify that the transfer credits requested are a solid basis for graduate work in our UTD program. Either the original transcript or copy of same and coursework description/syllabi are attached.

(Circle)
APPROVED  DENIED  Need more information ____________________________

(IF Applicable) APPROVED- VALID UNTIL (DATE): ____________________________

Faculty Member/Instructor/Advisor ____________________________  Date ____________________________

Associate Dean/Department Head ____________________________  Date ____________________________

Dean of Graduate Studies ____________________________  Date ____________________________

Office of Graduate Studies- updated 05/13/2016
CHECKLIST FOR TRANSFER OF COURSES INTO MECHANICAL ENGINEERING:

(Check each item if it meets the approved criteria)

___ Check to be sure no more than 8 hours TOTAL have been transferred

___ Note if transferred course is CORE course for track of study for graduation

___ Check to be sure course number is equivalent to a 6000 level course or above (cannot be an undergraduate number even if undergraduate number is approved at previously attended university for graduate credit)

___ Course was taken within 6 year master’s degree plan time limit

___ Grade received in course was “B” or better (“P” or “Pass” grade must be equivalent to “B”)

___ Request must be submitted along with a degree plan, signed by the faculty advisor

___ Copy of official transcript attached (only if course was completed after you applied to UTD) with course and grade marked (B or above)

___ Catalog description and/or official course outline (accredited United States universities)

___ If no catalog description is available (foreign universities only): provide an official course description signed by a university official ranking as a department chair or higher and sent directly to the UTD Mechanical Engineering Department. Also provide the name of the university official and contact information including university email address, telephone number, and fax number.

_____A URL may also be given if the material may be currently accessed from the Internet using the given URL.

Notice: Information provided by students for reason of obtaining waivers or transfers is considered as true and accurate. If such information is found to be falsified or inaccurate, it may be grounds for cancellation of enrollment and/or disciplinary action.

Transfer credit will not be applied to a degree plan until 9 credit hours have been successfully completed at UTD.
APPENDIX D

Committee Appointment Form
COMMITTEE APPOINTMENT
GRADUATE PROGRAM ______

Doctoral degree________  Master’s degree_______

________________________________ ID#________________________________

Student

Requests the formal appointment of the following members to serve as his/her supervisory committee:

______________________________________________________________

Supervising Professor  please print  signature

Co-Chair (if applicable)  please print  signature

Committee Member  please print  signature

Committee Member  please print  signature

Committee Member  please print  signature

Committee Member  please print  signature

______________________________________________________________

APPROVAL

______________________________________________________________

Department Head  signature  date

Dean of Graduate Studies  signature  date
APPENDIX E

Thesis Results Form
THE UNIVERSITY OF TEXAS AT DALLAS
GRADUATE PROGRAM IN MECHANICAL ENGINEERING
REPORT OF EXAMINATION FOR MASTER’S THESIS

We, the undersigned, as the Supervisory Committee for the master’s thesis of

(Student Name) ____________________________________________________________
(Student ID) ______________________________________________________________

report that he/she has presented his/her proposal and we have conducted the examination.

EXAMINATION DATE

The student has:

1. Completed the work assigned by the Supervisory Committee.

2. Passed all examinations required by the Graduate Program in Mechanical Engineering.

3. Completed a thesis which gives evidence of his/her ability to do independent research and itself constitutes a contribution to knowledge.

4. We recommend that he/she be granted the degree of Master of Science.

Conditions (if any) ________________________________________________________

____________________________________ (SIGNATURE)

COMMITTEE CHAIR (PRINT)

____________________________________ (SIGNATURE)

MEMBER (PRINT)

____________________________________ (SIGNATURE)

MEMBER (PRINT)

cc: Committee Chair
    Student
APPENDIX F

Graduation Checklist
GRADUATION CHECKLIST

**All students:**
- Schedule an appointment with Ashley Bradberry for a final degree audit to ensure that all necessary coursework to graduate has been completed. Your status will need to be changed to “eligible to graduate” in Galaxy/Orion.

- Enroll in a graduate level course at UTD. Doctoral students must be registered in three hours in the semester they defend. If applicable, complete in absentia form (see your department).

- Make certain to complete all incomplete grades. Check with your program office to be certain any necessary grade change forms have been received by the Records Office.

- Check with your program for any holds that may be on your student account.

- Fill out the Application for Graduation online through Galaxy by the deadline listed on the Academic Calendar.

- After you apply to graduate, you need to check your UT Dallas email on a regular basis. You will receive all correspondence regarding graduation and commencement there.

- If after you have applied, you realize you are not going to graduate, notify the graduate program administrator in your department.

- Make sure that the UTD Records Office has your most current mailing address to ensure that your diploma is sent to the correct location.

**Master’s Candidates with Thesis:**
- Refer to the Checklist for Final Submission of Master’s Thesis and Preparation of Dissertation and Thesis pages on The Office of Graduate Studies website.