



THE UNIVERSITY OF TEXAS AT TYLER
THE DEPARTMENT OF MECHANICAL ENGINEERING

ME Graduate Handbook

All about the ME Graduate Program

November 1, 2024

Contents

0.1	Mechanical Engineering Program	1
0.2	Nondiscrimination Statement	1
0.3	The Graduate Program in Mechanical Engineering	1
0.4	ME Graduate Program Mission Statement	2
0.5	Admission Requirement	2
0.6	Graduation Requirements	3
0.6.1	Thesis option	3
	Course Requirements	3
	Finding an Advisor	3
	Thesis steps	4
	Responsibilities for the Thesis Committee Chair	4
	A. General Guidelines	4
	B. Forming a Thesis Committee	5
	C. Thesis I: The Proposal	5
	D. Thesis II: The Defense	6
	E. Completion of the Thesis	6
	Responsibilities for the Thesis Committee Member	6
	Responsibilities of the Students	7
	A. General Guidelines	7
	B. Before Thesis I	7
	C. During Thesis I	8
	D. During Thesis II	8
0.6.2	Non-thesis option	8
	Course Requirements	8
	Procedure for adding classes after the start of the semester	9
0.6.3	Accelerated BSME/MSME (4+1) Option	9
	How is it possible to accelerate the graduate study?	9
	Who is eligible?	9
	How to apply for the Accelerated BSME/MSME Program?	9
	How to maintain your eligibility?	9
	Admission to Graduate School	10
	Am I eligible for financial support?	10
0.6.4	Common Course Requirements	10
	Typical course offering	11
0.6.5	Policy on out of department courses	12
0.6.6	Transfer of Credits	12
	Required process	12
0.6.7	Graduate Transient Courses	12

0.6.8	GPA Requirement	13
0.7	Financial Aid	13
0.7.1	Academic Affairs TA Stipend Process	13
	Eligibility	13
	Expectations for Continued Funding:	14
	Special Notes	14
0.7.2	College of Engineering Scholarships	14
	Enrollment Requirements	14
0.8	Graduate Program/Student Outcomes and Assessment	15
0.8.1	Program Outcomes	15
0.8.2	Student Outcomes	15
0.8.3	Assessment Criteria	15
0.9	ME Certificates and Specializations	15
0.9.1	Certificate of Specialization in Design and Mechanics	16
0.9.2	Systems and Control	16
0.9.3	Certificate of Specialization in Thermal-Fluid Systems	16
0.10	Other Important Graduate Study Information	17
0.10.1	Course Levels	17
0.10.2	Grades	17
0.10.3	Registration as a Full-Time Student	18
0.10.4	Student Wellness, Conflict Resolution and Changing an Advisor	18
0.10.5	Graduate Academic Probation/Suspension	18
	Graduate Academic Suspension	19

A Forms 21

0.1 Mechanical Engineering Program

The Department of Mechanical Engineering at the University of Texas at Tyler provides a student-focused, hands-on approach to engineering education, producing graduates who are highly sought after by employers and graduate schools across the nation.

Mechanical engineers represent one of the broadest of engineering disciplines, engaging in a variety of industrial and business operations, from large corporations and government organizations to small consulting firms. As a UT Tyler mechanical engineering graduate you will be well equipped to work in areas of high demand, such as computer-aided design and analysis, thermal and fluid systems, manufacturing processes and control, bioengineering, aerospace systems, and instrumentation.

0.2 Nondiscrimination Statement

The Mechanical Engineering Department at The University of Texas at Tyler does not discriminate or permit discrimination by any member of its community against any individual on the basis of race, color, national origin, religion, sex, sexual orientation, age, veteran status, or disability. Discrimination, including harassment, is defined as conduct directed at a specific individual or a group of identifiable individuals that subjects the individual or group to treatment that adversely affects their employment or education on account of race, color, national origin, religion, sex, sexual orientation, age, veteran status, or disability. Harassment, as a form of discrimination, is defined as verbal or physical conduct that is directed at an individual or group because of disability, sex, age, race, color, national origin, religion, citizenship, veteran status, or sexual orientation when such conduct is sufficiently severe, pervasive or persistent so as to substantially interfere with an individual's or group's academic or work performance; or of creating a hostile academic or work environment. Constitutionally protected expression cannot be considered harassment under this policy. All items related to nondiscrimination practices are outlined in the university's Handbook of Operating Procedures and are overseen by UT Tyler's Director of Human Resources.

0.3 The Graduate Program in Mechanical Engineering

The UT Tyler Department of Mechanical Engineering offers a Master of Science in Mechanical Engineering (MSME) degree, providing advanced levels of mechanical engineering education and research. The program is broad-based, allowing students to develop expertise in several areas ranging from design, manufacturing, thermal and fluid sciences to solid mechanics and mechanical control and instrumentation. The MSME degree program is flexible to accommodate students with bachelor's degrees in other closely related engineering majors. The program is structured and scheduled to serve both full-time and part-time graduate students, and to serve the continuing education needs of practicing engineers. Most mechanical engineering graduate courses are designed to integrate independent research and engineering practice into the course contents. Students with bachelor's degrees in physics or mathematics will need at least two full years of leveling courses before they can take graduate courses in the MSME program. Graduates of the UT Tyler program can be employed by private sectors and government agencies to serve as group leaders, principal engineers, managers and R&D technical staff. Students can also plan course selection in preparation for doctoral degree programs in mechanical or

other engineering disciplines.

0.4 ME Graduate Program Mission Statement

The mission of the Mechanical Engineering Department at The University of Texas at Tyler is to graduate and advance Mechanical Engineering professionals who are sought after by industry and graduate schools through maintaining a balanced environment of progressive education and training, advanced scholarship and research, as well as service with leadership to the public and the profession. Our aim is to equip students with knowledge and skills enabling them to perform with excellence, and lead, in their engineering careers, and in changing the world into a better place.

The MSME program supplements the accredited Bachelor of Science in Mechanical Engineering (BSME) program with either thesis or non-thesis options. This program allows students to make a seamless transition from baccalaureate-level to masters-level academic work, thereby expanding and fulfilling the attainment of the objectives and outcomes of the MSME program described below:

Prepare students for their professional careers in engineering practice and research with advanced knowledge base of greater depth and breadth in analysis, application of technological tools, scholarly and professional writing and presentation in their specialization.

0.5 Admission Requirement

Students entering the Master of Science in Mechanical Engineering (MSME) program are expected to have a background equivalent to that of students graduating from the Bachelor of Science in Mechanical Engineering (BSME) program offered at The University of Texas at Tyler, or to obtain such background through specified prerequisite coursework. Multiple factors are considered when making admission decisions by the Graduate Committee.

- Cumulative GPA of the applicant.
- Applicant's grades on pre-determined list of math and engineering courses.
- Applicant's academic recognition and honors.
- Exposure to undergraduate or graduate research, its variety and duration.
- The applicant's publication and intellectual products' history, if any.
- Applicant's work experience in related engineering fields.
- Applicant's background and its match with the graduate tracks and faculty expertise in the ME Department.
- Applicants with bachelor's degrees from foreign institutions must provide satisfactory English proficiency exam scores. Minimums: TOEFL (79), IELTS (6.5 band with at least a 6.0 in each subsection), PTE (53), or Duolingo English Test (105).
- Approval of the GPC and the Chair of the Department of Mechanical Engineering.

Consideration for admission to the Master of Science in Mechanical Engineering program will also be given to one or more of the following: the applicant's demonstrated commitment to his or her chosen field of study, socioeconomic background, first generation college graduate, multilingual proficiency, geographic region of residence, and level of responsibility in other matters including extracurricular activities, employment, community service, and family responsibilities.

0.6 Graduation Requirements

There are two tracks to earn the Master of Science in Mechanical Engineering (MSME): Regular-Track and Fast-Track (4+1). Both tracks allow the student to select either the Thesis or the Non-thesis option.

Regular-track: This is the common method of starting the MSME degree after a full completion of the BSME degree without any combinations between them.

Fast-track: This is also known as accelerated BSME/MSME Program (4 + 1 program) where undergraduate students in mechanical engineering can chose to receive a master's degree in a minimum of one additional year after completing the BSME graduation requirements. This option is also available to undergraduate students in the Honors Program as well as those transferring from other institutions.

The two options to receive the MSME degree include the following:

0.6.1 Thesis option

This degree option is intended primarily for students who wish to conduct research and expand mechanical engineering knowledge. A thesis is required. This is the only degree option for which graduate assistantship opportunities might be available.

Course Requirements

Students must successfully complete at least 30 semester hours of graduate credit coursework, including six hours of thesis credits. In addition to the required coursework and thesis, students in this option must successfully pass a proposal and a final oral examination administered by the student's graduate academic committee. For more details on the general course requirement please refer to [Common Course Requirements](#) Section.

Finding an Advisor

Students are recommended to seek out a faculty advisor to work with on his/her graduate research within the first quarter of beginning graduate study. The research advisor directs the student's research by providing research guidance, background information, computer resources, laboratory facilities, and often, research assistantship support. The advisor is on the student's thesis committee and is usually the chair of the committee. The advisor also closely reviews the research report, thesis, and is co-author on publications arising from the research project. Upon matching with an advisor, the faculty advisor should notify the [GPC](#). Students that are unable to find an advisor by the end of their first quarter will be put on coursework option.

Thesis steps

The faculty advisor should report the progress of each thesis student each semester by selecting of the steps below:

1. Approval of Thesis/Dissertation Committee (must be on file to qualify for Academic Affairs funding)
2. Literature Review
3. Develop research proposal under the direction of Chair and guidance from committee members
4. Proposal acceptance by Chair and committee
5. Collect and analyze data. Do not collect any data prior to approval from the IRB.
6. Revise the proposal into the thesis format under the direction of your Chair and obtain feedback from committee members.
7. Establish a defense date
8. Approval of defense
9. Prepare the final copy with committee member signatures
10. Final submission to Graduate School and Scholar Works

Responsibilities for the Thesis Committee Chair

A. General Guidelines

- Advise thesis student(s) with guidelines in the [“Responsibilities of the Students”](#) section, and maintain a respectful and professional attitude at all times.
- Follow the [Graduate School policies and procedures](#).
- Advise thesis student(s) to take relevant graduate courses based on the student’s field of study following the [ME graduate program requirements](#), and submit the updated [Graduate Program of Study Approval Form](#) prior to the beginning of every semester to [GPC](#).
- Help the student to develop a novel project idea.
- Assist the student(s) to understand the scope of the study.
- Provide the student with the [Thesis Student Responsibilities](#).
- Report the progress of the student to [GPC](#) at the beginning of each semester by selecting one the [Thesis Steps](#) that best describes the student’s progress.
- Inform the student that committee members including chairs may resign for the committee if the student does not make timely progress toward completion.
- Guide the student to produce original graduate level scholarship in the proposed thesis topic area.

- Meet with student(s) on a weekly basis to guide the student(s) in conducting literature review, selecting methods/procedures, and discussing and presenting the results.
- Maintain a respectful and professional attitude at all times.

B. Forming a Thesis Committee

- After being informed by GPC, meet with the student(s) to discuss mutual interests that will lead to a thesis.
- Guide the student(s) with a selection of two other thesis committee members (at least two ME faculty has to be in the committee).
- Complete the [Appointment of Thesis Committee \(ATC\) Form](#). Inform the [GPC](#) and obtain approval from the [ME Department Chair](#) prior to sending the ATC form to the [Graduate School](#).
- Forward the Graduate School approved ATC form to the [ME Department](#) to create MENG 5395 Thesis I course for the student.
- Ask the student to enroll in thesis course and copy the [ME Department](#).

C. Thesis I: The Proposal

- Assist the student(s) to set a realistic timeline of proposed studies, including development, review, and completion of the thesis proposal.
- Help the student to develop satisfactory thesis proposal report. The proposal report should have the following sections:
 1. Problem statement
 2. Broader Impact - How the outcome of this study affects the community?
 3. Introduction
 - (a) Literature review
 - (b) Contribution of the study – state how it is different from similar work in literature
 - (c) Objective of the research
 - (d) Expected outcomes and success metrics
 4. Methodology
 5. Preliminary Results
- Review and approve the proposal.
- Schedule the proposal defense with committee members for at least two weeks before scheduled proposal defense date.
- Send the proposal report to the committee members at least a week before the scheduled proposal defense date.

- Inform the thesis committee members and [GPC](#) on the results of the thesis proposal examination using the [ME Thesis Proposal Form](#).
- send the proposal report to the GPC to approve Thesis II course.

D. Thesis II: The Defense

- Provide ME Thesis Template to student(s) for thesis drafting.
- Provide feedback on all aspects of the thesis drafts, including grammar, clarity of writing, organization of the literature review, thoroughness of the study, the methodology proposed, and the manuscript formatting.
- Develop a timeline for draft submission.
- Read and approve both the abstract and the final draft of the manuscript before it is circulated to the thesis committee.
- Send the details of the thesis defense to [Graduate School](#) providing the [required information](#) and receive defense invitation form the Graduate School. Forward the thesis defense announcement from the Graduate School to [ME Department](#). Request to promote the thesis defense in your email to be promoted social media pages and the Graduate School Calendar.
- Prepare the thesis student(s) for the formal thesis defense following the Graduate School policy on [guidelines to conduct a thesis defense](#).
- Inform the [GPC](#) on the results of the thesis defense using the [Certify Completion of Graduate Program of Study Form](#).
- Ensure the comments received from the committees are considered in the final copy of the thesis.
- Review and approve the final thesis draft before acquiring all signatures on the second page of the ME Thesis Template.
- Send the signed [Graduate Program of Study Approval Form](#) to [GPC](#).

E. Completion of the Thesis

- Guide the student to submit the approved electronic draft with signed signature page to gradmanuscripts@uttyler.edu for final formatting check, copy you, and receive the recommended revisions.
- Ensure the student receives an email confirming the thesis manuscript is approved.
- Advise the student to upload the approved manuscript to ScholarWorks.

Responsibilities for the Thesis Committee Member

- Stay updated with the [Graduate School policies and procedures](#).
- Share the responsibility in ensuring that the student produces high-quality scholarship.
- Provide subject matter expertise as requested by Chair or student.

- Guide the student in the selection of methods/procedures for data collection and analysis.
- Assist the Chair and student as needed for clarification/resolution of methodological issues during the process.
- Read the proposal and manuscript drafts within the agreed-upon minimum time-frame, provide feedback and suggest substantive editorial change supported by rationale for both their support and critics.
- Discuss the concerns with the student and the chair immediately if major flaws are perceived that will likely result in student's unsuccessful defense.
- Assist the Chair in conducting the thesis defense.
- Maintain a respectful and professional attitude at all times.
- After the student successfully completes the manuscript and defense, the members, as well as the Chair, sign the manuscript.
- Faculty who wish to resign from a committee should demonstrate courtesy by directly informing the student.

Responsibilities of the Students

In order to ensure a timely graduation the following steps should be followed by a thesis student.

A. General Guidelines

- Follow the [Graduate School policies and procedures](#).
- Consult every step of the thesis study with the thesis chair.
- Confer with the Chair to set deadlines to make sure that they are working at a reasonable pace.
- Adhere to the [Graduate Program of Study Approval Form](#) after consulting with the thesis chair at the beginning of every semester.
- Contact the Chair in the event of any significant changes in his/her personal or professional life which may interfere with program completion.
- Document face to face meetings within 48 hours by emailing s summary of the discussion to the Chair.
- Avoid consulting the full thesis committee for feedback without prior approval of the thesis advisor.

B. Before Thesis I

- Contact [GPC](#) prior to meeting with the ME Department faculty.
- Choose a thesis topic and seek the Chair's approval.
- Contact faculty to serve as thesis advisor.

- Students who wish to change committee members should demonstrate courtesy by communicating about the change directly with the faculty involved.

C. During Thesis I

- Prepare adequately for the research meetings, inform frequently to the thesis advisor on the research progress, and confer with the thesis advisor with task deadlines to ensure the progression of the thesis.
- Communicate with the thesis advisor on a regular basis (at least 1-2 times per week) using email or other communication modalities approved by the Chair.
- Submit the draft Thesis I document(s) to thesis advisor on a timely manner.

D. During Thesis II

- Become familiar with the [Graduate School Calendar](#) and the deadlines for filling for graduation, scheduling the defense, and the final manuscript submission.
- Frequently inform the thesis advisor of the thesis progress.
- Consult with the thesis advisor to develop a timeline for thesis draft submission, and expect to make multiple revisions to the drafts throughout the entire process.
- Follow the ME Thesis Template to draft the thesis.
- Submit the proofread drafts to Chair on a timely manner.
- Work with the thesis advisor to schedule an official thesis defense only after the manuscript has been given the final approval by all committee members.
- Follow the [Guideline for the Conduct of a Thesis Defense](#).
- Submit the approved electronic draft with signed signature page to gradmanuscripts@uttyler.edu for final formatting check.
- Inform the thesis advisor after receiving confirmation and acceptance from ScholarWorks.
- Forward the ScholarWorks acceptance email to gradmanuscripts@uttyler.edu to receive the degree otherwise the degree cannot be conferred.

0.6.2 Non-thesis option

This degree option is intended primarily for the professional working engineer who wants advanced technical courses, including the possibility of benefiting from completing an advanced engineering project.

Course Requirements

Students must successfully complete at least 30 semester credit hours of graduate coursework, which may include three hours in a project course that culminates in an engineering report on a significant design or analysis project performed by the student, under the supervision of a faculty member. An internship course is also allowed, by permission of

the Graduate Coordinator and the Department Chair, to be counted towards the degree. For more details on the general course requirement please refer to [Common Course Requirements](#) Section.

Procedure for adding classes after the start of the semester

1. Fill the registration form and email it to ME@uttyler.edu copying your advisor.
2. Receive the advisor confirmation via email copying me@uttyler.edu

If there are seats available the ME Department will enroll the student.

0.6.3 Accelerated BSME/MSME (4+1) Option

Undergraduate students in mechanical engineering at UT Tyler can chose this option to get a master's degree in a minimum of one additional year. Students may choose any study option and can take up to 9 credits of graduate-level courses during their undergraduate studies, as well as one credit of senior or research seminar. Funding opportunities will only be available for students choosing the thesis option. Students interested in this track must obtain department approval, as described below, to enroll in this program.

How is it possible to accelerate the graduate study?

You will be given permission to enroll in maximum three approved graduate courses (5000 level) during your undergraduate studies. These courses will be counted toward your undergraduate degree and will also be transferred as graduate courses when you are admitted into the MSME program. This means you'll start your graduate studies transferring up to nine credit hours. Meanwhile, if you use three graduate courses to replace undergraduate electives, you'll be required to take one more credit hour in the form of a seminar course, at a minimum, to complete your undergraduate degree.

Who is eligible?

An undergraduate student with good standing and a GPA close to what is required for admission to the MSME program, as well as the Graduate Program Coordinator (GPC) approval.

How to apply for the Accelerated BSME/MSME Program?

Use the [link](#) to declare your intention to enroll in Accelerated BSME/MSME program. If eligible, you will receive an email confirming your enrollment in the program. Please note that enrollment in Accelerated BSME/MSME program doesn't guarantee your admission to the MSME program.

How to maintain your eligibility?

In addition to maintaining a minimum GPA of 3.0, at the beginning of each semester, you must [email](#) your updated GPA, latest unofficial transcripts, and study plan to the GPC and set an appointment to meet him. The GPC will also review your registration forms and remove your hold to allow you to enroll in graduate courses during your undergraduate studies.

Admission to Graduate School

When you finish your BSME degree, you should formally apply for graduate admission to the MSME program. Please make sure you meet the graduate admission [requirements](#) and [deadlines](#). Your admission in Accelerated BSME/MSME program will not allow you to start your graduate studies without formally being admitted by [Graduate School](#).

Am I eligible for financial support?

Any student who is approved to be in the thesis option and started his/her study under the supervision of a thesis advisor will be eligible to apply for Graduate Teaching Assistant (GTA), or Graduate Research Assistant (GRA) positions which, if approved and granted, qualifies them for in-state tuition. The number of awarded positions will depend on department needs, and the availability of funds. There are also other grants managed by the Graduate School which students can seek.

0.6.4 Common Course Requirements

Regardless of the option selected, a student must complete a graduate course in advanced mathematics (e.g. MATH 5311) or Analysis, or equivalent, approved by the Graduate Coordinator. At least one of the courses from the following list:

- MENG 5314 - Microelectromechanical Systems (MEMS)
- MENG 5328 - Advanced Finite Element Analysis
- MENG 5347 - Polymer Science and Engineering

Note: MENG 5328 - Advanced Finite Element Analysis satisfies both requirements.

In a total of twenty-seven hours, at least eighteen hours (including the thesis or project) must be from the Department of Mechanical Engineering, and within the major areas; and at most nine hours may be taken outside the department, college, or university. The Department of Mechanical Engineering has identified three major areas which include all the courses allowed for students pursuing the MSME degree. These areas include:

- Systems and Controls
- Design and Mechanics
- Thermal Fluid Systems

Any combination of courses from these areas is allowed for MSME students. Furthermore, three courses from one major area would constitute a certificate, and three certificates would fulfill the MSME degree requirements. Offering these certificates does not require a separate assessment plan. This is possible because we do assess at least one of the courses required for each certificate as part of the program assessment. If/when students complete the embedded certificates and are not degree-seeking, the college assessment professional will disaggregate degree seeking assessment results and non-degree seeking assessment results.

A project course and an internship course can be taken by permission of the GPC and the Department Chair and would count towards the MSME degree.

Typical course offering

Suggested Curriculum for the Mechanical Engineering MSME Program starting in **Fall Semester of an odd year** is given in table below where E denotes an Elective Course, and R denotes a Required Course. Students should take at least one of the courses identified with R* during their graduate studies.

Year and Semester	Course	Type	Concentration
First Year Fall Semester	MENG 5361 Biomechanics	E	Systems and Control
	MENG 5328 Advanced FEA	R*	Design and Mechanics
	MENG 5318 HVAC	E	Thermal Fluid Systems
	MENG 5345 Energy Conversion	E	Thermal Fluid Systems
	MENG 5395 Thesis I	R	
First Year Spring Semeste	MATH 5311 Advanced Engineering Math	R	Basic Science
	MENG 5314 MEMS	R*	Systems and Control
	MENG 5333 Mechanics of Composite Materials	E	Design and Mechanics
	MENG 5343 Advanced Heat Transfer	E	Thermal Fluid Systems
Second Year Fall Semester	MENG 5322 CAD/CAM	E	Systems and Control
	MENG 5362 Biomaterials	E	Design and Mechanics
	MENG 5348 CFD and Heat Transfer	E	Thermal Fluid Systems
	MENG 5379 Graduate Internship	E	
	MENG 5350 Project	E	
Second Year Spring Semester	MENG 5308 Robotics Vision and Control	E	Systems and Control
	MENG 5347 Polymer Science	R*	Design and Mechanics
	MENG 5342 Energy Management	E	Thermal Fluid Systems
	MENG 5399 Independent Study	E	
	MENG 5396 Thesis II	R	

Suggested Curriculum for the MSME Program starting in **Fall Semester of an even year** where E denotes an Elective Course, and R denotes a Required Course. Students should take at least one of the courses identified with R* during their graduate studies.

Year and Semester	Course	Type	Concentration
First Year Fall Semester	MENG 5362 Biomaterials	E	Systems and Control
	MENG 5328 Advanced FEA	R*	Design and Mechanics
	MENG 5348 Applied CFD and Heat Transfer	E	Thermal Fluid Systems
	MENG 5322 CAD/CAM	E	Design and Mechanics
	MENG 5395 Thesis I	R	
First Year Spring Semeste	MATH 5311 Advanced Engineering Math	R	Basic Science
	MENG 5314 MEMS	R*	Systems and Control
	MENG 5343 Advanced Heat Transfer	E	Thermal Fluid Systems
	MENG 5308 Robotics Vision and Control	E	Systems and Control
	MENG 5379 Graduate Internship	E	
Second Year Fall Semester	MENG 5322 CAD/CAM	E	Systems and Control
	MENG 5362 Biomaterials	E	Design and Mechanics
	MENG 5348 CFD and Heat Transfer	E	Thermal Fluid Systems
	MENG 5379 Graduate Internship	E	
	MENG 5350 Project	E	
Second Year Spring Semester	MENG 5333 Mechanics of Composite Materials	E	Design and Mechanics
	MENG 5347 Polymer Science	R*	Design and Mechanics
	MENG 5342 Energy Management	E	Thermal Fluid Systems
	MENG 5399 Independent Study	E	
	MENG 5396 Thesis II	R	

0.6.5 Policy on out of department courses

A graduate student can take up to three courses (for maximum 9 credit hours) from other departments or colleges. These courses will be counted toward the graduation of the student if offered as graduate-only courses by College of Engineering. For any other course to be counted toward graduation a request should be sent to the Graduate Committee at least one month ahead of the Census Day to allow the evaluation of the course.

0.6.6 Transfer of Credits

A student may transfer a maximum of 9 semester hours of graduate credit in which a grade of "B" or better has been earned from approved institutions. Transfer credit is subject to the approval of the GPC and the departmental chair. Transfer credits will count towards the nine credits allowed from outside the Department of Mechanical Engineering.

Required process

The students send the syllabus and his/her transcripts to the [GPC](#) for approval. The Graduate Program Coordinator will ask the Graduate Committee to review the content and rigor of the course under consideration. If approved, [Graduate Transfer Credit Form](#) will be submitted to update the student records. The form is also available through [Graduate School Website](#).

0.6.7 Graduate Transient Courses

UT Tyler graduate students who would like to take courses at another institution to transfer back into their UT Tyler graduate program should submit their [request](#) using their Patriots email address. If more than 12 hours is to be taken in a Fall or Spring

Semester, or more than 6 hours is to be taken in a Summer Semester a [different form](#) should be submitted for approval.

0.6.8 GPA Requirement

To graduate, students must earn at least a 3.0 grade point average on all coursework used for the graduate degree.

0.7 Financial Aid

Several types of financial aid are available for MS students who select the thesis option and start working toward the completion of their Thesis. Research assistantships involve participation in ongoing funded research projects and are awarded at the discretion of the faculty advisor. Some new students and most continuing students are supported through research assistantships. Research assistantships provide a monthly stipend and tuition for full-time study and research. A limited number of teaching assistantships are available. A teaching assistant has responsibility for running the laboratory portion of a course or for grading papers and holding office hours. Teaching assistantships cover tuition, provide a monthly stipend, and are arranged by the department with the endorsement from the faculty advisor. Fellowship, research assistantships, and teaching assistantships are subject to income tax.

For additional information and eligibility requirements, refer to the [Graduate Student Financial Aid](#) and [UT Tyler Graduate School Funding Opportunities](#).

0.7.1 Academic Affairs TA Stipend Process

These awards are given by Academic Affairs with the goal of increasing student research.

Eligibility

- The students should be available to work as a Teaching Assistant on campus, or if working remotely the appropriate level of support should be provided to justify funding.
- International students should submit TOEFL scores of 86 with the following minimum scores: Writing = 19, Speaking = 27, Listening = 14, Reading = 19 or 7 on the speaking portion of the IELTS.
- The student has committed to completing a thesis and has an Approved Thesis Committee form on file.
- If the student does not have a thesis committee formed, please wait until a subsequent semester to request funds.
- The nominating faculty member has committed to supporting the student's thesis work.
- The nominating faculty member has the approval of the department chair to submit a nomination.

- The student has agreed to record a Grad School 180 video presentation for consideration of inclusion in ScholarWorks.

Expectations for Continued Funding:

- Students should be moving along the [Thesis Step](#) submitted by each program; students who do not progress at a satisfactory rate will forfeit additional funding.

Special Notes

- A student who is international or a non-Texas resident and will need in-state tuition rate via this award should submit [RA/TA Waiver Request form](#) to scholarship@uttyler.edu.
- Any questions about hiring, hours worked, offer letters, etc. should be directed to HR.

0.7.2 College of Engineering Scholarships

The College of Engineering offers many scholarships. They range in criteria, requirements and amounts awarded. Students who are currently receiving the Presidential Fellow, Regents, Patriot, Patriot Achievement, Academic Excellence, Transfer Presidential, Named (endowed) Presidential, New Graduate Fellowship, National Merit Finalist and National Merit Semi-Finalist scholarships are **not** eligible to receive College specific scholarships. College specific scholarships do not automatically renew and require re-application each semester. UT Tyler scholarship recipients are required to complete the Free Application for Federal Student Aid (FAFSA) EACH ACADEMIC YEAR.

You do not have to qualify for Financial Aid to receive a scholarship, nevertheless, it is necessary to complete a FAFSA. For those that do qualify for Financial Aid and receive a scholarship, the scholarship award could change the amount of additional aid you qualify for.

Enrollment Requirements

- Graduate students must be enrolled in at least nine semester credit hours at the University of Texas at Tyler during a fall or spring semester in order to receive a College/Returning Student Scholarship.
- Graduate students must maintain at least a 3.25 cumulative GPA.
- A Letter of Appreciation is required for all academic and talent scholarships. Scholarship funds will not be disbursed until the Letter of Appreciation has been received by the One-Stop (STE 230).
- Only one submission per student is accepted.
- The scholarship application will be unavailable after the deadline.

To apply visit the [COE Scholarship website](#).

0.8 Graduate Program/Student Outcomes and Assessment

0.8.1 Program Outcomes

MSME students at the time of graduation are expected to:

- Apply fundamental knowledge of specialized mechanical engineering concepts in the various areas of Mechanical Engineering.
- Apply modern engineering tools for analysis and design of engineering problems.
- Demonstrate independent self-learning and research capabilities for solving engineering problems.
- Demonstrate an ability to effectively communicate results from engineering problems or other intellectual products.

0.8.2 Student Outcomes

Students admitted to the MSME program are required to demonstrate the following outcomes:

1. Apply fundamental knowledge of specialized mechanical engineering concepts and modern engineering tools in solving engineering problems.
2. Demonstrate independent self-learning and research capabilities for solving engineering problems.
3. Recognize their professional responsibility with the society, environment, engineering ethics, and lifelong learning.
4. Demonstrate an ability to effectively communicate results from engineering problems or other intellectual products.

0.8.3 Assessment Criteria

- Ability to apply knowledge of mathematics, science, and engineering in the field of mechanical engineering.
- An ability to identify/formulate/solve problems in mechanical engineering.
- An ability to communicate effectively.
- A recognition of the need for, and an ability to engage in, lifelong learning in the field of mechanical engineering.
- An ability to use the techniques, skills, and modern tools necessary for the practice of mechanical engineering.

0.9 ME Certificates and Specializations

To meet our goal of broadening the graduate degree to meet the needs of industry and local professional engineers for updated skills, the Mechanical Engineering department offers graduate certificate programs. The advanced engineering topics covered in the related coursework coupled with the thesis or project, establishes students' ability to apply

advanced technical knowledge in a specialized area related to mechanical engineering. These programs will consist of a sequence of multiple graduate courses in highly focused technical areas. Each certificate program is designed to attain professional expertise in the respective technical field in a minimum amount of time and without a commitment to a long-term educational objective. All courses taken for the certificates are regular graduate courses and count toward the higher degree programs. Each of these certificate programs form one of the engineering tracks in the MSME degree and may be used toward that degree program. Note that each of the required courses may not be offered every semester. Students already admitted to the Mechanical Engineering Graduate Program may choose any of the three paths from the list below to earn a certificate.

1. **Certificate of Specialization in Design and Mechanics.**
2. **Certificate of Specialization in Systems and Control.**
3. **Certificate of Specialization in Thermal-Fluid Systems.**

Students with a B.Sc. in Mechanical Engineering are eligible for immediate admission. Students with other bachelor's degrees may be required to make up appropriate undergraduate courses to have the background for the required graduate courses. Students already admitted to the Mechanical Engineering Graduate Program may earn a certificate along with their MSME by successfully completing any three courses for each path described below:

0.9.1 Certificate of Specialization in Design and Mechanics

- MENG 5328 Advanced Finite Element Analysis (Advanced FEA).
- MENG 5322 Computer Aided Design / Manufacturing (CAD/CAM)
- MENG 5333 Mechanics of Composite Materials.
- MENG 5347 Polymer Science and Engineering.
- MENG 5305 Advanced Mechanics of Materials and Applied Elasticity.

0.9.2 Systems and Control

- MENG 5314 Micro Electro Mechanical Systems (MEMS).
- MENG 5308 Robotics Vision and Control.
- MENG 5361 Biomechanics.
- MENG 5362 – Biomaterials.
- MENG 5330 Process Control.
- MENG 5344 Advanced System Dynamics.
- MENG 5309 Robotics Engineering.

0.9.3 Certificate of Specialization in Thermal-Fluid Systems

- MENG 5318 Heat Ventilation and Air Conditioning (HVAC).

- MENG 5345 Energy Conversion.
- MENG 5348 Applied CFD and Heat Transfer.
- MENG 5342 Energy Management.
- MENG 5343 Advanced Heat Transfer.
- MENG 5341 Advanced Thermodynamics.

0.10 Other Important Graduate Study Information

0.10.1 Course Levels

Courses are labeled with letter prefixes having the following meaning:

- Introductory (Freshman level) - 1XXX
- Intermediate (Sophomore level) - 2XXX
- Junior level - 3XXX
- Senior level - 4XXX
- Graduate level - 5XXX

Only a Graduate level course would be considered toward a MSME.

0.10.2 Grades

At the end of each regular semester and summer session, grades are available to the student through the student information system by web access. Grades, levels of performance, and grade points awarded for graduate credit at UT Tyler are as follows::

Grade	Level of Performance	Grade Points
A	Excellent	4
B	Good	3
C	Fair	2
D	Poor	1
F	Failing	0

Most courses use the traditional grading system, providing grades of A through F. However, grading may take other forms, including:

CR/NC	Credit/No courses as approved by the program. CR or NC may not subsequently be changed to a letter grade (See Credit/No-Credit Option.)
I	Indicates incomplete coursework. (See Incomplete Policy.)
W	Indicates withdrawal. (See Withdrawal Policy.)
IP	Indicates a course "in progress" that spans more than one semester.

There is a one-year time limit for grade changes and only the original instructor of the course may change a grade; in cases where the original instructor is no longer employed by UT Tyler, the department chair may submit a grade change on their behalf. CR and W designations may not be changed to letter grades. An "I" must be removed from the student's record within one year. See specific sections that elaborate on the institutional policies concerning the designations CR/NC, I, and W grades.

0.10.3 Registration as a Full-Time Student

Students enrolled in the MSME program will complete 30 semester hours of 5000-level graduate courses. These advanced courses are taken during a period of two years. See Section 0.6.4 for the list of the suggested graduate courses and their area of concentration for students starting in Fall semester of an odd and an even year respectively. The minimum credit hour load to be considered a full-time graduate student is nine semester hours during the fall, spring, or summer semester. The maximum credit hour load permitted is 12 semester hours. Minimum credit hours required per Financial Aid regulations are tabulated below:

Full-Time	Half-Time	3/4 Time	Less than Half
9	7	6	5 or fewer

0.10.4 Student Wellness, Conflict Resolution and Changing an Advisor

Students are encouraged to consult the Director of MS Program at any point regarding their academic progress, potential conflicts with their advisor or others in the program, or other concerns that relate to their well-being. In rare instances, a change of advisor may be necessary due to loss of funding, mismatch of research interests, or other reasons. If the student and/or primary research advisor believe at any point that the student would be better served by a different advisor, the student must immediately contact the GPC. Under these circumstances, the GPC will work with the faculty and student to determine a deadline by which the student must identify a new advisor to avoid exclusion from the program due to unsatisfactory academic progress. If the GPC is himself is the student's advisor, then the student is encouraged to contact the Department Chair. For changing an Advisor the Change of Thesis Committee form need to be Used to change membership of an existing committee. Committee membership must be approved by the Dean of The Graduate School.

0.10.5 Graduate Academic Probation/Suspension

A graduate student who has a cumulative grade point average of less than 3.0 will be placed on academic probation. For the purposes of determining compliance with the policies of academic probation, all summer sessions are treated as one semester.

Students placed on probation will automatically be dropped from the subsequent semester. Students will need to meet with their advisor, in-person or via Patriot email, and secure approval on the Graduate Student Probation Petition for Readmission form. Non-degree seeking students must obtain the signature of the Dean of the Graduate School in the place

of the academic advisor. Students must submit the form to the One-Stop Services Center before they can be re-enrolled and should not register for more than nine hours.

Students on academic probation must earn a minimum cumulative grade point average of 3.0 or above in the subsequent semester. Failure to do so results in continued probation. Continued probation status is allowed for only two terms, and failure to reach a minimum cumulative grade point average of 3.0 or above following the second semester in this status will result in suspension. Students placed on continued probation will also be dropped from the subsequent semester(s) and must follow the same procedure to re-enroll as described above for students placed on probation.

Grade points earned at other institutions are not used in computing the grade point average and may not be used to remove a deficiency. A student who leaves the University on academic probation or continued probation will be readmitted on academic probation or continued probation even if he or she has attended another institution in the interim.

Graduate Academic Suspension

A graduate student whose cumulative grade point average has not reached 3.0 or above following their second semester of continued probation will be suspended from the University for one semester or full summer for failure to meet the terms of continued probation. A student suspended from the University for the first time will be dropped from the subsequent semester(s) and must receive approval for readmission from the program advisor and the appropriate dean.

A student readmitted to the University after having been suspended must complete a Graduate Student Suspension Petition for Readmission form, with signatures from both their academic advisor and the appropriate college dean, to register. Non-degree seeking students must obtain the signature of the Dean of the Graduate School in the place of the academic advisor and college dean. The student will return on final probation.

Students returning from suspension and on final probation must earn a minimum cumulative grade point average of 3.0 or above in the subsequent semester. Failure to do so will result in permanent dismissal from the graduate program and the University.

Admission Denial Appeal Process

Applicants denied admission to a graduate program may appeal the decision within five days of receiving the admission decision. The appeal must be based on the grounds that the denial was a violation of the admissions policy and procedure or that the applicant's application was not evaluated in accordance with the criteria for admission set forth by the intended graduate program/department. Denials to graduate programs with restricted admissions based on their capacity to effectively serve students may not be appealed.

Students may appeal their admission decision by completing an application for appeal of an admission decision. This form is published on [The Graduate School Forms website](#). The appeal should include any supporting documentation that supports the appeal.

Any appeal of an admission decision to a graduate program shall be submitted in writing to the advisor for the program. The advisor shall have 10 work days to respond in writing to the appeal. If the applicant is not satisfied with the decision, he or she may appeal in writing to the chairperson of the department. The chairperson shall respond in writing within 10 work days. The next level of appeal is the dean of the college in which the

program is located. The dean will respond in writing within 10 work days of receiving the appeal. The final level of appeal will be the Admission Appeal Subcommittee of the Graduate Council. The subcommittee will respond in writing within 10 work days of receiving the appeal. The decision of the committee is final.

Appeals must be received prior to the term for which the applicant is seeking admission. If there is insufficient time to complete the appeal process before the beginning of the term for which the applicant seeks admission, the admission semester may be moved to the subsequent semester so the case may be reviewed.

Student Appeals

If an extraordinary situation other than grades adversely impacted your educational progress, you may submit an Application for Appeal form to have your appeal request considered by the Student Appeals Committee. All appeals submitted for consideration by the Student Appeals Committee, unless specifically noted as meeting an exception or special circumstance outlined on the Application for Appeal form, must include each of the following:

- A typed statement including the specific extenuating circumstance(s) leading to the appeal, and the specific outcome the student wishes the Committee to consider granting.
- A current degree plan, signed by the student's academic advisor, with the expected graduation term noted. Thorough documentation to support each extenuating circumstance noted in the typed statement.

Students should take the necessary time to document their appeals thoroughly before submission to the Enrollment Services Center (STE 230). As each appeal and the extenuating circumstances leading to them are unique, each student must arrive at their own decision about which documentation they feel best documents their claims and supports their appeal.

Appeals submitted without appropriate documentation (and those submitted with no documentation) may be subject to automatic denial, as noted on the Application for Appeal form.

Students will receive an email notification at their Patriots student email account regarding the outcome of their appeal after the Student Appeals Committee has reached its decision.

Appendix A

Forms

Graduate Program of Study Approval

TRANSFER COURSES ACCEPTED INTO PROGRAM

The following courses transferred to The University of Texas at Tyler will be used for this graduate degree:

Course Number	Course Title as listed on the Transcript (Institution)	Semester Credit Hours	Semester/Year Completed	Grade
---------------	--	-----------------------	-------------------------	-------

TOTAL CREDIT HOURS TRANSFERRED (9 MAX):

UNDERGRADUATE LEVELING COURSES TO BE COMPLETED

The following undergraduate leveling courses must be completed before the graduate degree is awarded and before taking a graduate course for which one or more of these courses is a prerequisite:

Course Number	Course Title as listed in the Catalog	Semester Credit Hours	Semester/Year Completed	Grade
---------------	---------------------------------------	-----------------------	-------------------------	-------

TOTAL CREDIT HOURS OF LEVELING COURSES:

The Thesis Committee must be approved by the Dean of the Graduate School before a student can enroll in thesis hours.

Student Information

Student Name: Enter Student's Name

Student ID: Enter ID Number

Program: Enter Program

Semester Entered: Semester

Year Entered: Year

Title of Thesis:

Enter thesis title

Committee Information

Appropriately qualified faculty may serve on a thesis committee at the request of the student and the graduate program. The minimum requirement for a Thesis Committee is three members, including the Thesis chair, who must be a qualified member of the Graduate Research Faculty, and at least two other members of the Graduate Research Faculty, one of whom must be from the program in which the degree is being sought. One member may be external to the program or university. Exceptions to the composition of a committee may be granted by the Dean of the Graduate School.

Committee Chair	Chair's Name	Dept.	Chair's Dept.	Graduate Faculty Status
Member	Member's Name	Dept	Member's Dept.	Graduate Faculty Status
Member	Member's Name	Dept	Member's Dept.	Graduate Faculty Status
Member	Member's Name	Dept	Member's Dept.	Graduate Faculty Status
Member	Member's Name	Dept	Member's Dept.	Graduate Faculty Status

For Visiting Graduate Faculty

Description of Visiting Graduate Faculty member's expertise in relation to thesis topic:

Enter description of expertise.

Approvals

Department Chair: Department Chair's Name

Approval Date: Select Approval Date

Graduate School Approval: Enter Name

Approval Date: Select Approval Date

Please complete this form and submit any additional supporting materials necessary to
 The Graduate School (GradForms@uttyler.edu)

** This form is NOT to be submitted by the student. **

Master's Thesis/Project Proposal Form

STUDENT INFORMATION:

Student Name: _____
 Semester Entered: *Choose an item.*
 Degree Sought: Master of Science in Mechanical Engineering

Student ID: _____
 Year Entered: _____

THESIS/PROJECT INFORMATION:

Graduate Degree Option: *Choose an item.*
 Thesis/Project Title: _____
 Thesis/Project Proposal Date: _____

THESIS/PROJECT COMMITTEE INFORMATION:

Name: _____ Department: _____
 (Chair)

(if any):
 (if any):
 (if any):

RECOMMENDATIONS BY THE THESIS/PROJECT COMMITTEE:

Based on the students' thesis/project proposal presentation and the understanding of the proposed research topics, the committee recommends the following action:

- The student PASSED the proposal presentation and will incorporate the comments and suggestions from the committee into the Thesis/Project work.
- The student FAILED the proposal presentation and will require to reschedule a second presentation with the Thesis/Project committee.

SIGNATURES OF THE EXAMINING COMMITTEE:

_____ (Chair)	_____ Date
_____ Date	_____ Date
_____ Date	_____ Date

DEPARTMENT APPROVAL:

_____ Graduate Program Coordinator	_____ ME Department Chair
Date	Date

ATTACHMENTS OF THE THESIS PROPOSAL PRODUCTS:

Certify Completion of Graduate Program of Study

STUDENT AND DEGREE INFORMATION:

Student Name: _____ Student ID: _____
 Degree Sought: Master of Science in Mechanical Engineering Examination Date: _____
 1st Interest Area: Choose an item.
 2nd Interest Area: Choose an item.
 Thesis or Project Title: _____
 Undergraduate Degree: _____ Date Awarded: _____
 Undergraduate Institution: _____

CERTIFICATION BY THE EXAMINING COMMITTEE:

By the signatures below, the examining committee certifies that:

1. The approved program of study of the student is expected on Semester/Year.
2. The committee has given the above referenced student a final examination for the degree being sought and that the results of the examination are as follows: (Select one only)
 - The student **PASSED** the GPA requirements over academic coursework; no thesis or project is required. Further, the student has met all departmental requirements for the degree.
 - The student has **PASSED** the oral examination on the master’s engineering project, and the committee **approves** the student’s engineering project report. Further, the student has met all departmental requirements for the degree
 - The student has **PASSED** the oral examination of the master’s thesis, and the committee **approves** the student’s master’s thesis. Further, the student has met all departmental requirements for the degree.
 - The student **FAILED** final oral examination and the committee recommends another oral examination on: mm/dd/yy.

SIGNATURES OF THE EXAMINING COMMITTEE: (ONLY CHAIR FOR COURSEWORK ONLY DEGREE OPTION)

(Chair)	Date:		Date:
	Date:		Date:
	Date:		Date:

DEPARTMENT APPROVAL:

	Date:		Date:
Graduate Program Coordinator		ME Department Chair	