## MASTER OF SCIENCE IN MECHANICAL ENGINEERING 2024/25 Catalog and Later <u>Thesis Track</u>

#### **Total Minimum Hours: 30**

The program consists of a minimum coursework requirement of 30 credit hours. All MSME program students must successfully complete EML 6105: Advanced Thermodynamics and Statistical Mechanics, EML 6653: Applied Elasticity, and EML 6060: Advanced Mathematics II.

The MSME with thesis option requires an additional minimum of 15 credit hours of approved coursework and a minimum of 6 thesis hours for a total of 30 semester hours. Students without an engineering bachelor's degree will be required to complete undergraduate engineering pre-requisite courses as determined by the Department. Please contact the Graduate Program Director for more information.

#### Core Requirements (9 hours)

EML 6105: Advanced Thermodynamics and Statistical Mechanics (3) EML 6653: Applied Elasticity (3) EML 6060: Advanced Engineering Math II (3)

Thesis (6 hours) EML 6971: Thesis: Master's

#### **Other Requirements:**

- Minimum 9 credit hours of courses must come from within ME Department.
- A <u>maximum</u> of 3 credits of independent study may be applied to meet the degree requirements.
- A <u>maximum</u> of 6 credits taken outside the Mechanical Engineering department may be applied to meet the degree requirements.
- Before graduating, the MSME with thesis track students must prepare a thesis and present it to the Supervisory Committee.
  - The student must present a typed final draft to the Supervisory Committee and Graduate
    Advisor one week before the final oral examination.

# Master of Science in Mechanical Engineering

## **Thesis** Option

#### Curriculum Program of Study Form (updated 3/2025)

Name:	Term/Year Admitted into Program:				
USF ID #					
Address:					
Phone:					
Email:					
30 Total Credits of Coursework					

All students enrolled in the MSME thesis track <u>must</u> take a total of 9 credit hours of core courses (listed below). In addition to these 9 credit hours, the MSME with thesis option requires a minimum of **6** thesis hours and a minimum of 15 credit hours of **approved** coursework.

Course Title	Number	Credits	Semester	Outside ME?	Grade
Required core courses:					
Advanced Thermodynamics	EML 6105	3			
Applied Elasticity	EML 6653	3			
Advanced Engineering Math II	EML 6060	3			
6 thesis hours	• •		•	·	
Thesis: Master's	EML 6971	3			
Thesis: Master's	EML 6971	3			
15 additional credits of approved cours	sework	1	1	1	
· Out of 21 additional condition					
✓ Out of 21 additional credits, minimum 9 credit hours of EML	Total Credits Outside ME				
courses must come from within department					
✓ Maximum 3 credit hours	Total Credits Independent Study				
Independent Study Maximum 6 credit hours from outside department	Total Credits (30 required)				