# MECHANICAL ENGINEERING GRADUATE PROGRAM HANDBOOK

## FOR STUDENTS WHO STARTED THEIR PROGRAM FALL 2023

UNIVERSITY OF SOUTH FLORIDA

COLLEGE OF ENGINEERING 4202 E. FOWLER AVENUE, ENG 030 TAMPA, FLORIDA 33620-5350

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**Revised August 2023** 

#### PROGRAM OF STUDY

**MASTERS DEGREES:** The department offers two Master's degrees: (1) Master of Science in Mechanical Engineering (MSME) without thesis, and (2) Master of Science in Mechanical Engineering (MSME) with thesis. All MSME Program students must successfully complete 30 credit hours of graduate coursework and meet the following requirements:

MSME degree requirements (30 credit hours total)

Required courses

EML6105: Advanced Thermodynamics and Statistical Mechanics

EML6653: Applied Elasticity

EML6069: Advanced Mathematics I OR EML6060: Advanced Mathematics II

9 credit hours of Mechanical Engineering coursework (EML6xxx)<sup>1,2</sup>

Maximum allowed

6 credit hours of approved coursework outside Mechanical Engineering

Ph.D. dissertation template, which may be found, along with formatting guidelines, on the USF Graduate School Thesis and Dissertation website: <u>https://www.usf.edu/graduate-studies/students/electronic-thesis-dissertation/etd-formatting-requirements/index.aspx</u>. The Main Body of the document should be formatted single-sided, double-spaced, with 1-inch margins.

: The document needs to include a Title Page, Table of Contents, Abstract, Main Body and References. The Main Body should be of sufficient length to satisfy the grading criteria above and include hime Of The vertice of the vertice

- Introduction 1.5 0 Td[hi)6 (ghl)6 (i)6 (ght)004 Tc -0.18eTc 0 Tw 21.19 0 Td004 Tc -014.6 This section should include a brief introduction with the motivation, problem statement, and main contributions.
- Review of the Relevant Literature This section needs to:
  - provide a comprehensive review of the most relevant and important research papers related to the proposed field of study,
  - reflect understanding of the research methods, equations, and theories reviewed, and
  - highlight gaps in knowledge that need to be addressed with further research (i.e., proposed research studies).
- Research Proposal

## MASTERS DEGREE

- Before graduating, the MSME with thesis track students must prepare a thesis and present it to the Supervisory Committee. <u>The student must present a typed final</u> <u>draft to the Supervisory Committee and Graduate Advisor one week before the</u> <u>final oral examination</u>. The successful thesis defense satisfies the graduate degree requirement for a comprehensive exam.
- MSME without thesis track students must submit two project reports completed as part of the EML coursework requirement to the Graduate Program Director during the semester of graduation for evaluation and assessment. This project portfolio satisfies the graduate degree requirement for a comprehensive exam. Failure to submit will delay graduation certification.
- All work applicable to the Master's degree requirements must be completed within five years from the time the student is first admitted into his/her program.

## Ph.D. DEGREE

- Students must be admitted to candidacy before they register for dissertation hours.
- The student must conduct an investigation resulting in an original and significant

#### MECHANICAL ENGINEERING FACULTY AND AREAS OF SPECIALIZATION

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