

# MASTER OF SCIENCE IN MECHANICAL ENGINEERING

## Program

## Requirements

Code	Title	Credits
MEEG 5415	Engineering Applications of Numerical Methods	3
<b>Core Concentration Courses</b>		
Select seven courses from the following: <sup>1</sup>		21
<b>Thermal Systems</b>		
MEEG 5323	Thermal Management of Microdevices	
MEEG 5346	Energy Conversion	
MEEG 5353	Computational Fluid Dynamics	
MEEG 5354	Heat and Mass Transfer	
MEEG 5356	Renewable Wind Energy	
MEEG 5362	Turbomachinery	
MEEG 5364	Combustion	
<b>Mechanical Systems</b>		
MEEG 5301	Feedback and Control Systems	
MEEG 5305	Design of Mechatronics Systems	
MEEG 5310L	Product Manufacturing Lab	
MEEG 5312	Advanced Product Design and Manufacturing	
MEEG 5319	Applications of Finite Element Analysis	
MEEG 5321	Theory and Applications of Robot Kinematics	
MEEG 5322	Advanced Dynamics	
MEEG 5324	Micro and Nano Manufacturing	
MEEG 5327	Fracture Mechanics	
MEEG 5330	Mechanics of Composite Materials	
MEEG 5372	Applications of Theory of Elasticity	
MEEG 5376	Stability of Structures	
MEEG 5410	Vibration Analysis	
<b>Thesis</b>		
MEEG 6971	Thesis I <sup>2</sup>	3
MEEG 6972	Thesis II	3
<b>Total Credits</b>		<b>30</b>

<sup>1</sup> Students following the non-thesis option will select two additional courses for a total of 27 elective credits.

<sup>2</sup> Students will select an academic advisor and secure approval of the program director.