

# MASTER OF SCIENCE IN MECHANICAL ENGINEERING, PLAN A

## Requirements Effective Fall 2023

Code	Title	Credits
Select 2 courses from the following:		6-7
CBE 521	Mathematical Modeling for Chemical Engineers	
CIVE 560	Advanced Mechanics of Materials	
ENGR 550/ MATH 550	Numerical Methods in Science and Engineering	
MATH 530	Mathematics for Scientists and Engineers	
MECH 529	Advanced Mechanical Systems	
MECH 532/ BIOM 532	Materials Issues in Mechanical Design	
MECH 538	Mechanical Engineering Thermodynamics	
MECH 539	Advanced Fluid Mechanics	
MECH 544	Advanced Heat Transfer	
MECH 568	Computational Methods for Mechanical Eng.	
Electives <sup>1</sup>		11-18
Select one from the following:		6-12
MECH 699A	Thesis: Bioengineering	
MECH 699B	Thesis: Energy Conversion	
MECH 699C	Thesis: Environmental Engineering	
MECH 699D	Thesis: Heat and Mass Transfer	
MECH 699E	Thesis: Industrial and Systems Engineering	
MECH 699F	Thesis: Mechanics and Design	
MECH 699G	Thesis: Computer-Assisted Engineering	
MECH 699H	Thesis: Robotics	
MECH 699I	Thesis: Solar Engineering	
MECH 699J	Thesis: Computational Fluids	
MECH 699K	Thesis: Materials	
MECH 699L	Thesis: Plasma Engineering	
MECH 699M	Thesis: Motorsport Engineering	
<b>Program Total Credits:</b>		<b>30</b>

A minimum of 30 credits are required to complete this program. Of the 30 minimum credits required for this program, at least 24 credits must be at the 500-level or above and earned at CSU.

<sup>1</sup> Select courses with approval of advisor and graduate committee.