

MASTER OF SCIENCE IN MECHANICAL ENGINEERING, PLAN B

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 ¹		17-18
Scholarly Paper (select one from the following):		6-12
MECH 695A	Independent Study: Bioengineering	
MECH 695B	Independent Study: Energy Conversion	
MECH 695C	Independent Study: Environmental Engineering	
MECH 695D	Independent Study: Heat and Mass Transfer	
MECH 695E	Independent Study: Industrial and Systems Engineering	
MECH 695F	Independent Study: Mechanics and Design	
MECH 695G	Independent Study: Computer-Assisted Engineering	
MECH 695H	Independent Study: Robotics	
MECH 695I	Independent Study: Solar Engineering	
MECH 695J	Independent Study: Computational Fluids	
MECH 695K	Independent Study: Materials	
MECH 695L	Independent Study: Plasma Engineering	
MECH 695M	Independent Study: Motorsport Engineering	
Program Total Credits:		30

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.

¹ Select courses with approval of advisor and graduate committee.