PH.D. IN MECHANICAL ENGINEERING

Requirements Effective Fall 2023

Co	de	Title	Credits
Select one course from the following: 3			
	CBE 521	Mathematical Modeling for Chemical Engineers	
	ENGR 550/ MATH 550	Numerical Methods in Science and Engineering	
	MATH 530	Mathematics for Scientists and Engineers	
	MECH 568	Computational Methods for Mechanical Eng.	
Select 2 courses from the following:			6
	CIVE 560	Advanced Mechanics of Materials	
	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	
Electives			
Electives ¹			3-32
Master Degree Credit			
Master Degree Credit ²			30
Di	ssertation		30
	MECH 799A	Dissertation: Bioengineering	
	MECH 799B	Dissertation: Energy Conversion	
	MECH 799C	Dissertation: Environmental Engineering	
	MECH 799D	Dissertation: Heat and Mass Transfer	
	MECH 799E	Dissertation: Industrial and Systems Engineering	
	MECH 799F	Dissertation: Mechanics and Design	
	MECH 799G	Dissertation: Computer-Assisted Engineering	
	MECH 799H	Dissertation: Robotics	
	MECH 799I	Dissertation: Solar Engineering	
	MECH 799J	Dissertation: Computational Fluids	
	MECH 799K	Dissertation: Materials	
	MECH 799L	Dissertation: Plasma	
	MECH 799M	Dissertation: Motorsport Engineering	

Program Total Credits:

72

A minimum of 72 credits are required to complete this program. Of the 72 minimum credits required for this program, at least 21 credits must be at the 500-level or above and earned at CSU. Minimum of 15 credits with the MECH subject code. Minimum 12 credits in regular courses numbered 500 and above (not including dissertation, independent study, or supervised teaching).

¹ Select courses with approval of advisor and graduate committee.

² A maximum of 30 credits may be accepted from an engineering master's degree.